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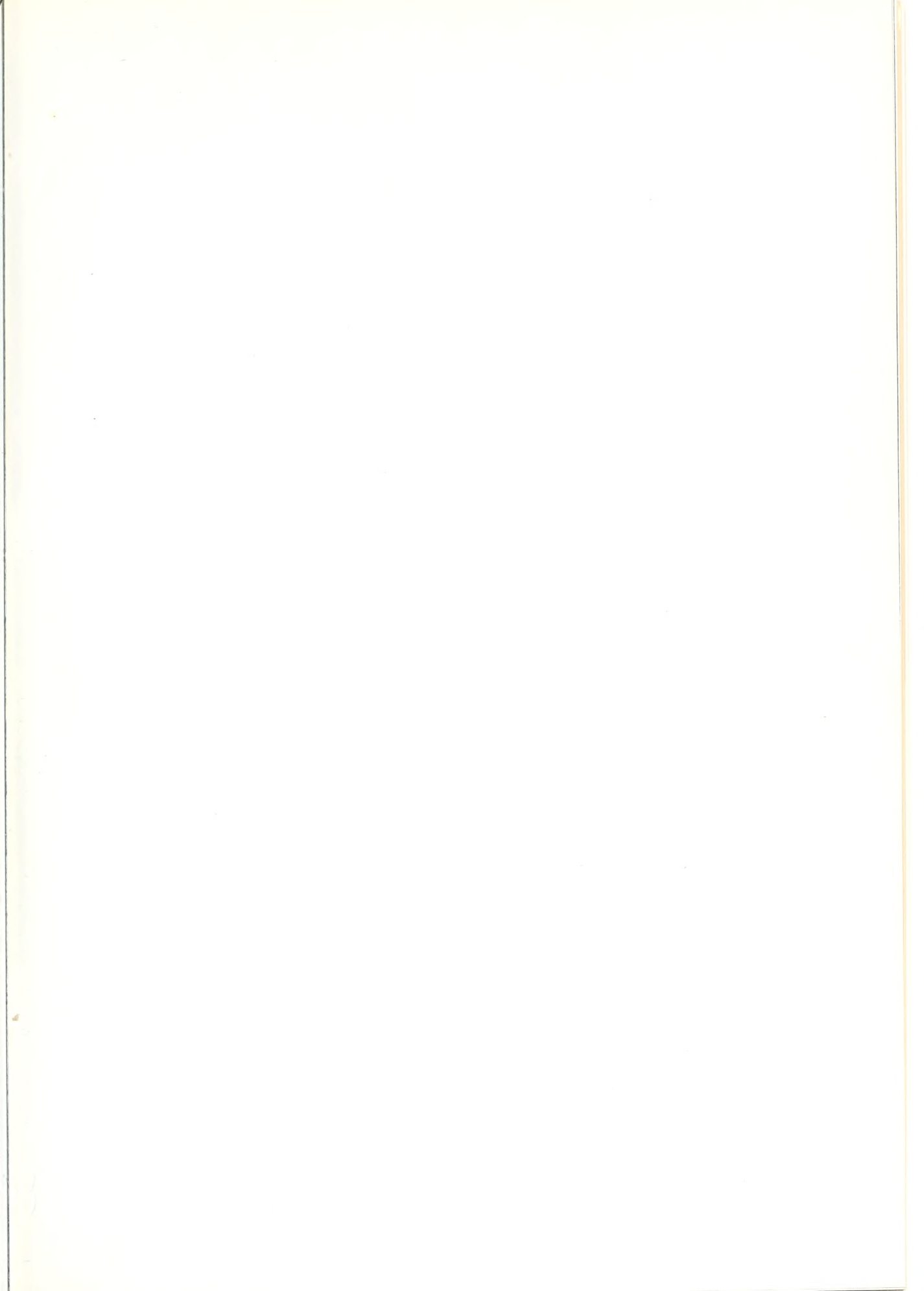
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IN THIS ISSUE

The Pediatric Assistant
Katherine Anderson, M.D.



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References: (1) Salerno, L. J., Ortiz, G., and Turkel, V.: Vaginitis: A Diagnostic and Therapeutic Approach, Scientific Exhibit, presented at the 115th Annual A.M.A. Convention, Chicago, Illinois, June 1966. (2) Nugent, F. B., and Myers, J. E.: *Pennsylvania Med.* 69:44, 1966.



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closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative derm-

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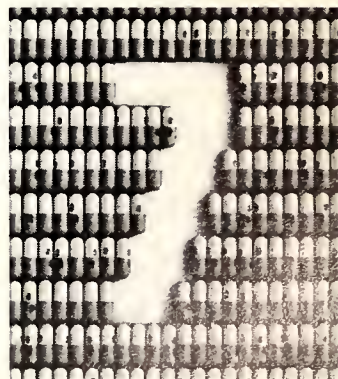
Stevens-Johnson syndrome, toxic epidermal necrolysis, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Agranulocytosis can occur even in spite of regular, repeated normal white counts. Stomatitis is rare, salivary gland enlargement may require cessation of treatment. Such patients should not receive subsequent courses of the drug. Vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While definitely attributable to the drug, a causal relationship cannot

be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angitis, pericarditis and several cases of anuria, glomerulonephritis and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

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Precautions: Nonsusceptible organisms

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Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative

dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN.

Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. **Intracranial**—bulging fontanels in young infants. **Teeth**—yellow-brown staining; enamel hypoplasia. **Blood**—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. **Liver**—cholestasis at high dosage. Upon adverse reaction, stop medication and treat appropriately.

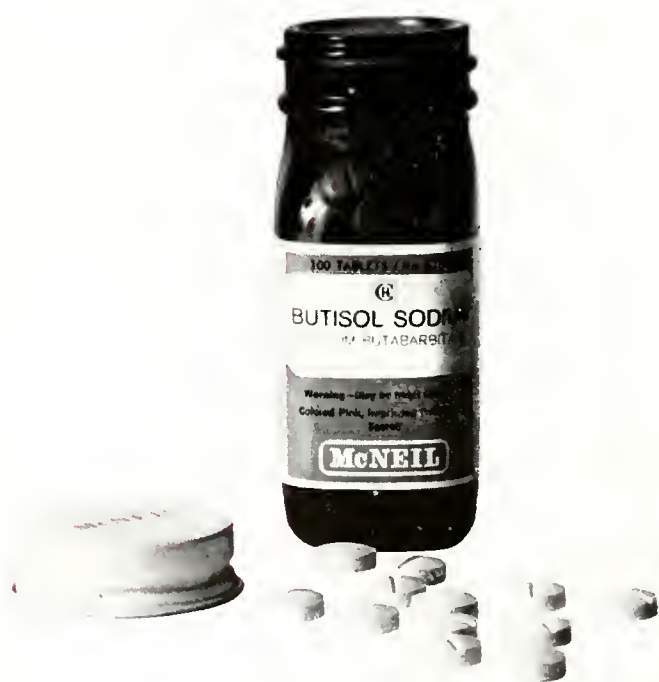
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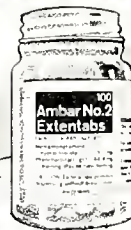
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JAMES PARSON
DIED 1743
HE HAD OFTEN EATEN A WHOLE
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SHAKESPEARE

WAS AWARE OF THE DANGERS OF OBESITY HE WROTE...

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and more thy grace;
leave gormandizing;
Know thy grave doth
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than for other men.



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Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

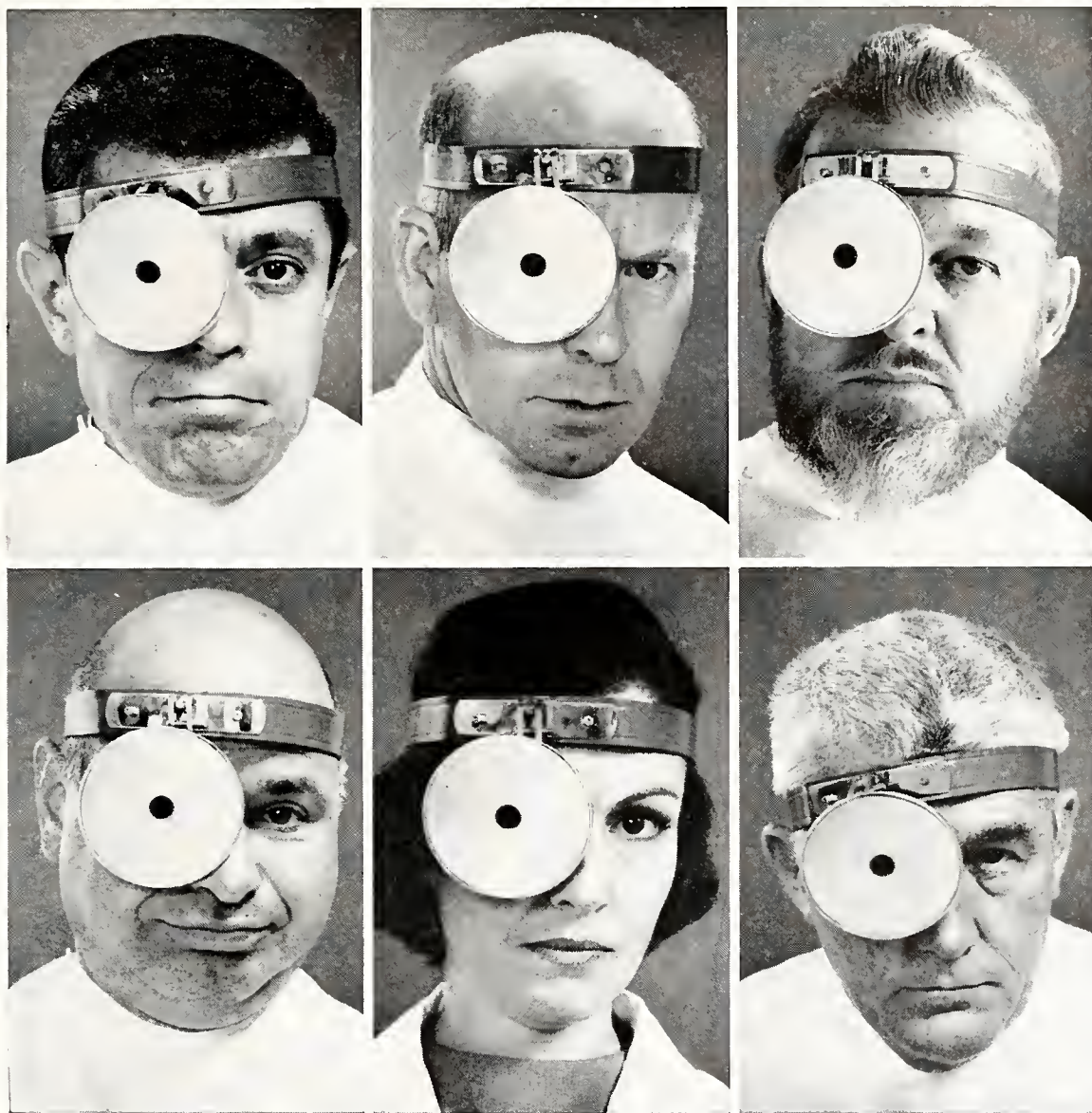
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BRIEF SUMMARY/Indications: Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

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Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons

on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculo-

popular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

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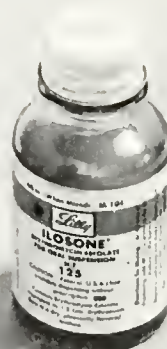
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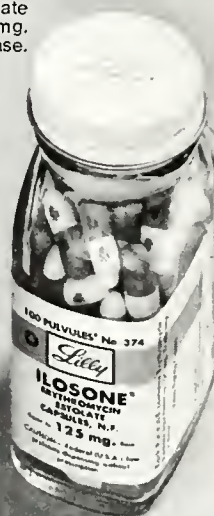
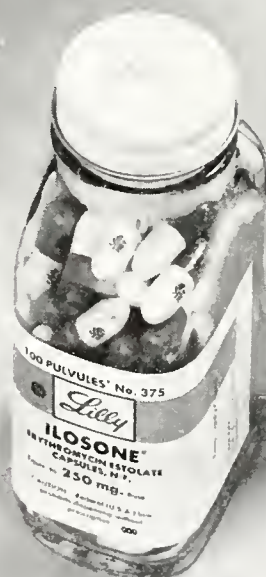


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will contain
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The Pediatric Assistant

KATHERINE H. ANDERSON, M.D. AND LEE POWERS, M.D.

The concept of the physician's assistant, like most great ideas, has been around for many years, awaiting its professional calling. Only in the last few years, with the rapidly expanding demand for health care, has there been a need for a formally trained assistant to the physician as an integral member of the health care team.

The current crisis in health care in the United States is well documented,¹⁻² and nowhere is the need greater than in pediatrics.³⁻⁶ Medical educators have proposed the training and utilization of new categories of health professionals in the provision of various aspects of health care as a means of alleviating the physician manpower shortage.⁷⁻¹¹ Several innovative programs involving an expanded role for nurses or the development of new roles in the health care system are already under way.^{8, 15-18}

Pediatricians have been delegating some patient-care responsibilities to assistants who have received training and experience on the job.¹⁶⁻¹⁸ However, no universal definition of duties and no formal accredited training program have been available for the pediatric assistant.

Responding to the national mandate for broader child-health services, the Bowman Gray School of Medicine of Wake Forest University began a Pediatric Assistant Training Program in the fall of 1969. To prepare for its venture into this new area of health education, the School of Medicine

found it necessary to formalize recruitment, determine training requirements, and attempt to insure effective utilization of the pediatric assistant. This required a foreknowledge of (1) patient-care tasks which could feasibly be delegated to a qualified but less highly trained assistant; (2) the pediatrician's willingness to delegate these tasks; and, (3) the acceptance by the consumer of such delegation of the physician's responsibilities for child-health supervision.

PEDIATRIC PATIENT-CARE TASKS IN NORTH CAROLINA

This study was designed to analyze patient-care tasks in two selected pediatric practices in small North Carolina towns and compare the results with similar studies of pediatric practices in the large urban-suburban medical school communities of Seattle, Washington, and Rochester, New York.¹⁹⁻²²

Method

Two pediatricians, both Board-certified, cooperated in the study during the spring of 1969. One was a member of a group of three pediatricians practicing in a town of 35,000 population (Doctor A). The other was in solo practice in a town of 20,000 population (Doctor B). Each man was followed by a senior pediatric resident from the first call in the morning until the return home in the evening. Four days were spent with Dr. A and five with Dr. B.

The work analysis method used is known as "systematic work sampling." This is a statistical technique used to measure the percentage of time spent in various activities, using pre-arranged categories.²³ A systematic observation was made every 30 seconds

From the Department of Pediatrics, Division of Allied Health Programs, The Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, N. C. 27103.

This report was made possible by contract no. PH 103-69-28 from the Department of Health, Education, and Welfare, National Institutes of Health, Bureau of Health Professions Education and Manpower Training.

and recorded under the proper activity classification, totaling 3400 observations for Dr. A and 4000 observations for Dr. B. The percentage of observations for a particular activity is a reliable measure of the percentage of time devoted to that activity. The office visit of each patient was timed to the nearest minute, and work sampling was continued during hospital rounds.

minutes for Dr. A and eight hours, 30 minutes for Dr. B. Dr. A takes evening and hospital calls every third night and every third weekend, while Dr. B returns to the office to see patients for one to two hours after dinner almost every evening.

In small-town North Carolina practice, the percentage of well children is less than the 45-50 % usually quoted for pediatric prac-

Table 1
Average Number of Patients Seen and
Average Office Hours Per Day

	Present Study		Bergman et al ¹⁹	Hessel & Haggerty ²¹
	Dr. A	Dr. B		
Office patients/day	27.3	39.6	20.0	21.3**
Hospital patients/day	3.8	2.2	3.0	1.5**
Office hours/day	9.2	8.5*	8.3	7.9**

*Evening office hours not included

**Calculated on the basis of a 5½ day work week

Table 2
Diagnostic Categories of Office Patients

	Dr. A	Dr. B	Bergman ¹⁹	Hercules & Charney ²²
Total number patients observed	109	198	481	312
Well child	32.1%	17.2%	46	45
Sick child	67.9%	82.8%	54	55

Table 3
Pediatrician's Working Day Expressed in Percentage of Time

	Dr. A	Dr. B	Bergman ¹⁹
	%	%	%
Time with patients	58.0	58.6	49.4
Office	55.5	56.3	45.6
Hospital	2.5	2.3	3.8
Home	none	none	none
Other	42.0	41.4	50.6
Telephone	3.1	5.2	12.5
Administration and consultation	8.1	3.2	8.0
Paper work	6.5	3.9	9.0
Travel (auto)	2.3	0.5	6.0
Personal	16.3	25.8	8.0
Miscellaneous	5.7	2.7	7.0

Dr. A attended 124 patients, including 15 hospital patients, during the study period, and Dr. B attended 209, including 11 hospital patients.

Results

In this study, the average number of patients seen per day and the average office hours per day are compared with those of previous studies in Table 1.^{19, 21}

The working day of the two physicians observed in the study averaged nine hours, 10

minutes (Table 2).

Both of the pediatricians observed spend time once or twice a month helping staff well-baby clinics. When these children become ill, they are seen in the doctor's offices. In the absence of other available clinic facilities in the community, these sick children increase the percentage of sick-child visits in the private office. While the proportion of well children is less in these two North Carolina practices, well children and those with

minor respiratory infections still account for about 66% of the total patient load.

Table 3 compares the time spent during the pediatric working day in the small North Carolina towns and in the Seattle area. In both areas, only about half of the pediatrician's working day is spent in the presence of his patients.

The percentage of time spent in categorized physician activities during the office

visitation: 80,000). All three are well trained and highly esteemed in the community. Their patients come from a radius of 30-40 miles. None of the three hospitals in this town has house officers.

Dr. B is in his first year of practice and is establishing the first pediatric office in a town of 20,000. He has taken over the office and the child patients of his partner, who is completing a pediatric residency training

Table 4
Time Allotment of the Office Patient Visit
Expressed as Percentage of Time

	Dr. A	Dr. B	Hessel & Haggerty ²¹
Total No. Patient Visits Observed	109	193	357
	%	%	%
History	13.2	15.9	—
Family—social	0.6	0.4	
Past medical	2.0	4.2	
Present illness	10.6	11.3	
Examinations			
Well child	14.5	8.0	22.5*
Sick child	13.5	21.9	15.6
Treatment	19.3	12.0	24.7
Prescription	—	—	8.5
Minor medical advice	—	—	16.2
Procedures	3.6	7.7	4.8
Direct action	1.6	2.1	—
Technical	2.0	5.6	—
Well child advice	12.4	13.2	19.2
Feeding	4.3	0.7	—
Growth and development	1.5	0.2	—
Immunizations	1.9	1.0	—
Other	4.7	11.3	—
Counseling	1.5	1.9	—
Chart work—health forms	4.4	13.1	3.3
Personal talk with parents	2.8	0.6	—
Telephone interruption	9.0	5.1	—
Travel (foot)	4.1	0.6	—
Miscellaneous	2.3	0.8	10.0

Due to rounding, totals may not add exactly to 100%

*Includes history and physical examination

**—: No report

visit is shown in Table 4 and compared with previous reports where possible.

Discussion

Each of these two North Carolina practices provides the only pediatric resource for a small town and its surrounding area, where the majority of children are cared for by general practitioners.

Dr. A is associated with an established group of three pediatricians. They are the only pediatricians in Catawba County (popu-

lation after 13 years of general practice in this community. All deliveries are done by general practitioners, who take care of their own newborns. The hospital admissions consist of acutely ill children or patients with serious problems. The local hospital has no house officers.

Observing physicians who provide the sole pediatric resource in a large geographic area adds a further dimension to the "average" pediatrician's day. Not unexpectedly, the

percentage of ill children (Table 2) and those who present problems is higher than in areas where the medical school faculty members serve as the ultimate consultants for serious problems. Acutely ill hospitalized patients also require more of the pediatrician's time when he performs the technical tasks which the house officer in the university hospital usually assumes. The two North Carolina pediatricians see more patients and have a longer work day than other pediatricians (Table 1). They utilize the lunch hour for daytime business and personal activities and often return to the office at night to see patients.

Telephone conversations were not as time-consuming in our study as in other studies. Telephone time was charted separately as interruption of the patient visit and as calls handled out of the presence of the patient. Of the total office day, Dr. A spent 8% and Dr. B 6.7% talking on the telephone as compared to the 12.5% of office time reported by Bergman and others¹⁹ and the 27% day reported by Hessel and Haggerty.²¹

Work sampling on a systematic 30-second basis provides an opportunity for more accurate recording of particular activities than continuous time-motion studies and tends to obviate the problem Bergman and others¹⁹ had in separating patient-time into sharply defined categories. However, it was difficult in this study to separate *treatment* into categories requiring physician expertise and another for very minor "grandmotherly" medical advice. Such advice was often dispensed during the writing of prescriptions, many of which were for symptomatic therapy. In the opinion of the pediatrician and the observer the major portion of this treatment time was spent in giving minor common-sense medical advice which an assistant could be trained to give.

Well-child advice (12.3%—A, 13.2%—B, 19.2%—Hessel and Haggerty) relates to normal growth and development, feeding, child behavior, and anticipatory guidance. Bergman and colleagues²⁰ have listed the items most frequently discussed in the patient interview and in advice given to parents concerning general child development

and behavior: immunization, diet and feeding, sleep, bowels, toilet training, urinary problems, school performance, and childhood illness. A training program with emphasis on growth and development, preventive medicine, nutrition, family-child interrelationship, and physical norms can prepare an assistant to relieve the physician of this important but time-consuming aspect of well-child care.

Counseling (1.5% A, 1.9% B) is used to denote physician management of more serious emotional and behavioral problems when these constitute the primary reason for the office visit. In the experience of one of us (K.H.A.) in private practice, other patient-care tasks frequently pre-empt the time which both the pediatrician and the parents would like to devote to these problems. An assistant could help to provide a sound base for pediatric counseling by making visits to the home or the school for evaluation and exchange of information.

If a pediatric assistant assumes, under the pediatrician's direction and supervision, the major responsibility for history taking, well-child evaluation and care, and minor medical advice, approximately half of the pediatrician's time can be freed for ill children and those with problems needing his special skills. Delegation to the assistant of a portion of the duties of giving advice over the telephone and a screening type of physical examination for sick children would free an additional 10% of the physician's time.

The assistant can make a real contribution to the thorough assessment of the child and the quality of care by performing careful visual and auditory screening, developmental evaluation, growth charting, and screening types of laboratory tests.

Pediatricians recognize that visits to the home provide insight into the family-child relationship which is difficult to obtain in the office setting, but pressure of time has made the house call a rarity (none were made during the study). The assistant can provide valuable information by visiting the home for an evaluation of the home situation and for a follow-up on an illness. He can visit the school for the exchange of informa-

tion when school adjustment or performance is a problem. The assistant can assume much of the responsibility for instructing mothers of newborns in the hospital, with follow-up visits to the home after the discharge from the hospital.

The assistant can identify the child's deviations from normal health progress and alert the pediatrician to abnormalities which require his attention.

Pediatric Opinion Concerning Utilization of Allied Health Workers

In 1967 the American Academy of Pediatrics conducted a mail survey of regular Fellows of the Academy to solicit pediatric opinion about utilization of allied health workers in pediatric practice. The survey, with 90% responding, indicated that a substantial proportion of Academy Fellows are prepared to move in the direction of greater task delegation and inter-professional patient care.^{24, 25}

Throughout the nation, the item which the pediatrician was least willing to delegate was the *physical examination* (Table 5).²⁵ Of interest is the recent analysis of 6,668 routine physical examinations done on infants under one year of age by 83 pediatricians.²⁶ Significant abnormalities were discovered in 130 examinations (1.9%), but it was estimated that only 16 of these abnormalities could not have been detected by a pediatric assistant trained in the techniques of complete physical examination. This study suggests that a major portion of routine infant appraisal, utilizing the physical examination as one of the tools, can be delegated in order to achieve more efficient utilization of the physician's time. In Denver the pediatric nurse practitioners have been able to give total care to more than 75% of the children who come to the field stations, including almost all of the well children.¹⁷

A substantial majority of pediatricians in the United States (75%) have expressed the opinion that the utilization of a trained assistant would increase either the quality or the volume of practice, or both. The job potential for this new type of health worker is indicated by the number of pediatricians

(64%) who have said they would employ such a trained worker full-time or part-time.

The most serious obstacles to the use of such an assistant expressed by the pediatricians were lack of trained workers and the unanswered questions of insurance liability and medical practice laws. The Corporate Law Department of the AMA has suggested modification of state medical practice acts modeled on that of Oklahoma.²⁷

Nothing in this article shall be so construed as to prohibit service rendered by a physician's trained assistant, a registered nurse or a licensed practical nurse if such service be rendered under the direct supervision and control of a licensed physician.

The development of programs for training physicians' assistants without established guidelines or supervision by the medical profession might lead to chaos. A Duke University conference pointed up the need for curricular and legal control. Instead of a specific practice act, the conference participants favored a possible licensing provision for the employers of physicians' assistants which would set forth qualifications for training and employment.^{28, 29}

The specific technical and patient-care tasks which the respondents expressed a willingness to delegate are important in structuring a training program for this new health role. Many of the purely technical tasks are already being delegated and are therefore not included in the table summary of opinions regarding delegation (Table 5).²⁵ Of interest is the low percentage of delegation of out-of-office tasks and home, hospital, nursery, or school visits. This contrasts sharply with the expressed interest in these visits if time or qualified personnel were available for them.

Parent Reaction to the Concept of Pediatric Assistants

Skinner²¹ and Austin and associates¹³ have reported favorable parent acceptance of pediatric well-child assessment as done by an assistant on alternate patient visits at approximately one-half the usual pediatric fee. Silver³⁰ reported that 94% of the parents expressed satisfaction with the joint services

Table 5
Comparative Attitudes of Pediatricians and Parents Toward
the Delegation of Patient Care Tasks

	A.A.P. Survey of Physicians ²⁵	Patterson Survey of Parents ³¹
Location	U.S.A.	Seattle Area
No. of Respondents	5,798	145
Patient care tasks in office	% Favorable	% Favorable
History		
Present illness	38	64-82
Past medical	63	80+
Family—social	74	80+
Interval history		
Well child	64	—*
Sick child	45	61-85
Telephone advice		
Child care	76	80+
Minor medical	58	65+
Information		
Child care	91	90+
Immunizations	88	90+
Interpret instructions	85	90+
Advice		
Minor medical	52	65+
Child care	62	80+
School child	40	63-89
Examination		
Well child	25	57-80
Sick child	19	20-48
Patient care tasks out of office		
Maternity hospital visits	32	24-78
Home visits		
Observation	68	—
Acute disease follow-up	49	48-70
Chronic disease	58	43-74
Behavior problem	44	65
School visits	68	80

*—: No report

they received from a pediatrician and a nurse practitioner team and with their opportunity to maintain adequate communication with the physician. Half of the parents felt that the joint care was better than they received from a physician alone.

Patterson, Bergman and Wedgewood³¹ conducted structured interviews in the homes of 145 mothers in the Seattle area. Roughly one-half of the group had regular pediatric care from private pediatricians, one-third were in a group-prepayment plan and the remainder utilized public health clinics. Approximately 75% of the mothers approved of the concept of the pediatric assistant for well-child care, and 94% indicated that they would be willing to try it, if it were deemed necessary by the physician and if the assistant were well-trained and capable.

The same questions about specific task delegation which were presented to pediatricians in the AAP survey were asked of these parents. Though the series is small, the willingness to accept delegated patient-care services exceeded the pediatricians' willingness to delegate these tasks.

Summary

By the method of work sampling, pediatric practice in two small North Carolina towns has been analyzed. The results are compared with previous time-motion studies of pediatricians in large urban medical school communities. While these North Carolina pediatricians have a longer work day and see more ill patients, the time allotment for office visits is quite similar. The pediatrician spends at least 50% of his office time

with well children and very minor illnesses. Much of this patient-care responsibility can be delegated to a trained pediatric assistant.

A large proportion (75%) of the pediatricians responding to the nationwide survey of the American Academy of Pediatrics believed a pediatric assistant would increase the volume of patients a pediatrician could handle or would improve the quality of practice, or both.

A survey indicated that most parents would have no objections to pediatric assistants who were properly trained and supervised.

However, there should be a continuing evaluation of the contribution of this new health worker in extending health care more efficiently and more economically.

A proposed definition and job description for a pediatric assistant is outlined in the appendix. A draft of a 24-month training program is available upon request.

Acknowledgment

The authors wish to thank Dr. Dewitt Trivette and Dr. David Williams for their cooperation in this study.

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APPENDIX

PEDIATRIC ASSISTANT TRAINING PROGRAM

Pediatric Assistant: Definition

The pediatric assistant is a new type of health worker who assumes responsibility for a significant portion of well-child health care, as directed by and under the supervision of a child-care physician. Employing knowledge of preventive medicine, growth and development,

nutrition, family and behavioral counseling, and physical norms, the assistant evaluates the status of the well child and counsels parents about normal development or minor problems. The assistant is capable of differentiating major from minor illness and of appropriate reporting and referring to pediatrician as indicated.

Job Description

Job title: Pediatric Assistant

Responsible for: Promoting and protecting the health of well children, in association with and under the supervision of a child-care physician. (Identifying illness, abnormalities, and behavioral problems. Referring to the physician abnormalities, illness, and behavioral problems other than those of a very minor nature and any problems for which the parents desire referral. Consulting the pediatrician when there is any question concerning the advisability of the referral.)

Supervised by: Employing pediatrician or clinic director.

Minimum qualifications required: Two years of college with courses in biology and chemistry, or satisfactory training and experience as a medical corpsman. Two years of formal training in an approved pediatric assistant program leading to certification. Ability and willingness to work with children and parents of all socio-economic levels.

Materials and equipment used: Growth charts, stethoscope, otoscope, ophthalmoscope, sphygmomanometer, Titmous vision tester, Snellen charts, audiometer, developmental test materials, draw-a-man tests, hemoglobinometer, microscope.

Work performed:

A. History and Physical Assessment

1. Evaluates the child by means of:
 - a) Measurements and growth charting
 - b) Detailed history-taking and recording, including family-social, past medical, present illness and interval events
 - c) Complete physical examination and recording, including the use of the stethoscope, otoscope, and ophthalmoscope
 - d) Screening tests for vision, hearing, and developmental level
 - e) Hemoglobin or hematocrit determinations, urinalyses, blood counts, bacterial cultures
2. Identifies deviations from normal, illness, and behavioral problems.
3. Checks newborn infants in the nursery and visits

the mother during her stay in the maternity hospital.

B. Family-Child Counseling (growth and development, behavioral problems, nutrition, and preventive procedures)

1. Interprets prepared information sheets to parents.
2. Provides telephone advice on routine questions of well-child care.
3. Gives advice and counsel on minor problems of feeding, development, and behavior of the infant and young child.
4. Gives advice and counsel on minor adjustment problems of the school-age child or adolescent.
5. Provides information on feeding, normal growth and development, child care and training, accident prevention, immunizations, etc.
6. Visits schools to obtain and exchange information.
7. Participates in group or community health education programs.

C. Medical and Preventive Services

1. Interprets and performs skin tests and immunizations according to A. A. P. standards of child health care.
2. Arranges immediate provision for emergency care.
3. Refers to the pediatrician any significant illness, abnormalities, or behavioral problems, or any problems for which the parents desire the pediatrician's attention.
4. Consults the pediatrician when there is any question of the significance of abnormal findings.
5. Provides advice on management of minor medical problems to office patients.
6. Provides telephone advice on management of minor medical problems.
7. Visits homes for:
 - a) Observation or evaluation of home situation
 - b) Follow-up of acute illness
 - c) Advice-giving or treatment purposes in management of chronic illness.
 - d) Advice-giving in management of adjustment and behavioral problems.

D. Other

1. Represents the pediatrician in these delegated activities and reports to him any action needed or taken.
2. Participates in training and supervision of pediatric aides.
3. Attends conferences and reads pertinent professional literature.
4. Performs other related duties as required or assigned.

Congenital Eventration of the Diaphragm in Infancy

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Eventration of the diaphragm is usually regarded as a condition in which one leaf of the diaphragm takes a position abnormally high in the chest, but retains its continuity and normal attachment to the costal margins. The condition is rare, it is occasionally incompatible with life, and it may produce no symptoms. Infrequently, however, and particularly in infants and children, it is manifested by definite symptoms or signs, and early surgical intervention may be life-saving.

According to Laxdal,¹ Petit made the first description of eventration of the diaphragm in 1774. By 1959 Christensen² had found "about 300 cases" reported in the literature.

The incidence of congenital eventration of the diaphragm cannot be estimated with accuracy until proper routine roentgenograms have been done consecutively in a large series of newborn infants. The condition has been regarded as relatively rare, but Beck and Motsay³ found it in 4% of the subjects in an x-ray survey of 2,500 infants. Only three of these displayed definite symptoms. One died of suffocation.

In the infant, successful surgical repair of diaphragmatic eventration has been reported infrequently. Bisgard⁴ reported the first case of surgical correction in a 6-week-old male infant in 1947. In 1956 DeBord and Quinta⁵ could find only 9 surgical cases in the literature;^{1,4,6-10} they added one case of their own. Subsequently, 7 cases have been reported in English and Japanese journals.¹¹⁻¹⁵ The number of surviving patients is increasing, but it is still too small to warrant full knowledge of the best means of diagnosis and management. Details of these cases are summarized in the accompanying table.

Report of Case

A 12-week-old Korean infant boy was admitted to the Yonsei University Severance Hospital on March 12, 1966, with the referring diagnosis of diaphragmatic

hernia. The prenatal course had been uncomplicated by any illness or accident, and labor and birth had been normal. The baby had experienced occasional coughing and dyspnea on feeding, and frequent upper respiratory infections since birth. When he was 12 weeks old, a roentgenogram of the chest had been

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made because of another attack of upper respiratory infection with dyspnea. It revealed evidence of dextrocardia and elevation of the left side of the diaphragm.

Physical examination on admission revealed a well developed, well nourished baby in no acute distress. Respiration was rapid and there was dyspnea on feeding or crying. The body temperature was 97 F (36.1 C), the respiratory rate 36 per minute while resting, and the blood pressure 130/30 mm Hg.

The chest was symmetrical. Percussion was hyperresonant over the left lower part of the chest. Heart sounds were faint over the left hemithorax, and the maximal heart sounds could be heard at the nipple line of the fourth intercostal space of the right hemithorax. Breath sounds were absent over the left lower lung field.

The hemoglobin was 11 gm/100 ml, and the white cell count was 8,150/cu mm, with a differential count of 20% neutrophils, 76% lymphocytes, 1% monocytes, and 3% eosinophils. The urinalysis was within normal limits.

Roentgenograms of the chest showed elevation of the diaphragm on the left side to the level of the fifth rib posteriorly, and marked dextrocardia (Fig. 1). Fluoroscopic examination revealed the absence of respiratory excursions of the left diaphragm.

Barium enema examination found the colon in a subdiaphragmatic position. The clearly visualized diaphragm on the left side was seen forming a round, unbroken line, arching from the mediastinum to the costal margin (Fig 2). This study led to the diagnosis of eventration of the diaphragm rather than simple diaphragmatic hernia.

Operation was done on March 14, 1966, with the patient under endotracheal general anesthesia. The left hemithorax was entered by a posterolateral incision in the eighth intercostal space. The left diaphragm was found to be membranous, thin, and translucent throughout except for the anterior margin, which was studded by a rim of mucocoeles. It bulged upward into the chest. Two layers of multiple continuous plicating silk sutures were applied to the diaphragm, lowering its position and strengthening it sufficiently to withstand intra-abdominal pressure. A chest tube was inserted and connected to an under-water sealed bottle.

The postoperative course was smooth and the patient was discharged from the hospital on the tenth hospital day in good condition.

On April 4, 1967, one year after surgery, the baby

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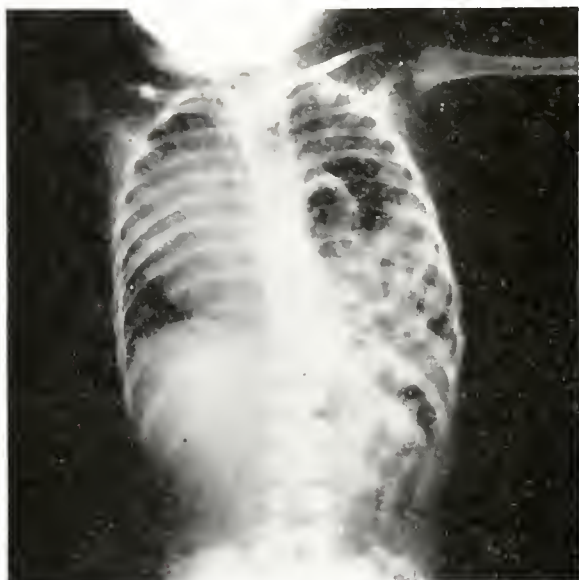


Fig. 1. Preoperative roentgenogram of the chest showing elevation of the left side of the diaphragm and the marked dextrocardia.

appeared to be in good health. Physical findings were normal.

Roentgenograms of the chest showed the left lung to be expanded and the mediastinum and diaphragm in normal position (Fig. 3). Fluoroscopic examination of the diaphragm revealed synchronized movement of the left side; this movement was reduced in comparison to that of the right.

Etiology

There has been no satisfactory explanation of the cause of congenital eventration of the diaphragm. The condition may be either congenital or acquired.

The congenital form may be the result of faulty migration of the muscle into the pleuroperitoneal fold, which fails to reinforce the diaphragm adequately during embryonic life. The experience of others^{5,7,8,12} has suggested that the muscular component of the diaphragm is often limited to the periphery. The theory of congenital origin has been supported by such factors as the presence of the condition in the newborn, frequent association with anomalies of the gastrointestinal tract, and the failure to elicit a history of birth trauma. Electrical stimulation of the phrenic nerve and surgical exploration may be necessary to determine the exact nature of the lesion.

Injury to the phrenic nerve during birth



Fig. 2. Roentgen study following barium enema reveals splenic flexure of the colon in subdiaphragmatic position.

can lead to acquired eventration of the diaphragm, and the frequent association of breech delivery or Erb's palsy are supporting evidence for such an origin. It has been observed that in acquired eventration of the diaphragm in the newborn, the muscular components of the diaphragm maintain a nearly normal appearance except for the latter's higher position in the chest.

It can be speculated that following injury to the phrenic nerve, a considerable time interval is required for the diaphragm to become thin and membranous in appearance.

Diagnosis

Symptoms of eventration of the diaphragm vary widely. Many adult patients are symptom-free, whereas infants and children may die in cardiorespiratory failure. There may be cyanosis, dyspnea, and tachycardia with dextrocardia, owing to the labile nature of the mediastinum. If symptoms fail to appear within the early years of life, the condition tends to remain symptomless until cardiopulmonary reserve decreases as intra-abdominal pressure increases. In the re-

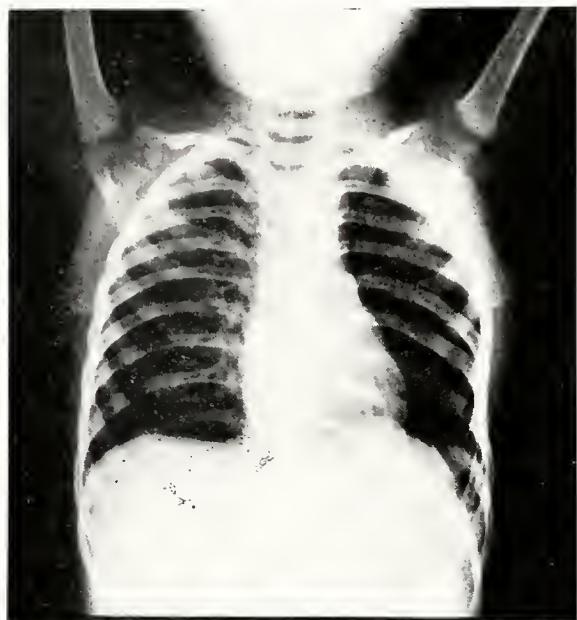


Fig. 3. Roentgenogram of the chest one year after surgery shows the left lung expanded and the mediastinum and diaphragm in normal position.

view of 18 cases including the present case, 12 patients manifested dyspnea or cyanosis, or both, particularly upon feeding or crying, and 2 had cough only; 2 others had experienced vomiting and cough. The associated anomaly of malrotation of the midgut was found at operation in one of these cases.

The diagnosis of eventration of the diaphragm, then, may be difficult, if it is attempted solely on basis of the history and physical examination. Dextrocardia, evidence of mediastinal shift, absence of breath sounds, and the presence of audible bowel sounds in the chest suggest that proper x-ray examination be done. This should lead to the correct diagnosis. According to Michelson,¹¹ Hoover's sign, the accentuated outward excursion of the costal margin on the affected side from failure of the diaphragmatic action to oppose the intercostal action, and the absence of vocal fremitus over the lower part of the chest on the affected side can be expected.

In the postero-anterior projection of roentgenograms of the chest, the elevated diaphragm forms a round, unbroken line, arching from the mediastinum to the costal margin. In the lateral view, both leaves of the diaphragm can be visualized, with the affect-

ed one arching high into the thoracic cavity. X-ray examination should include barium studies of the esophagus, stomach, and colon, and fluoroscopic examination of the diaphragm. Fluoroscopic study of the diaphragm may reveal such varied findings as diminution or absence of respiratory excursion of the affected side, paradoxical motion, or, when synchronous motion is present, reduction in the degree of excursion on the affected side.

Differential diagnosis of diaphragmatic eventration and diaphragmatic hernia is often a difficult one. In congenital eventration of the diaphragm, the symptoms and signs may be less prominent and may occur at a later period than in the diaphragmatic hernia.

Roentgenological features of posteroanterior and lateral views of the chest in cases of congenital eventration of the diaphragm may differ from those of the hernia, such as the unbroken line of the diaphragm which arches from the mediastinum to the costal margin.

In left-sided eventration, barium examination of the stomach and colon may reveal clearly the subdiaphragmatic location of the abdominal viscera, whereas in cases of diaphragmatic hernia, abdominal organs are usually found above the diaphragm. Use of pneumo-peritoneum may help to distinguish the two conditions, but it must be remembered that fatalities from use of this technique¹⁸ have been reported.

Treatment

Treatment of eventration of the diaphragm includes a wide variety of procedures. If the infant suffers acute episodes of dyspnea and cyanosis as result of eventration, surgical intervention is indicated without further delay.

The aim of surgical treatment is to restore the diaphragm to the normal position. Such a procedure prevents shift of the mediastinum, corrects dislocation of the heart, and contributes to normal ventilation of the lung.

The diaphragm can be repaired through the thoracic, abdominal or thoraco-abdominal approach. The thoracic approach is pre-

Table 1
Summary Of Cases Reviewed

Authors Year	No. of Cases	Age & Sex Delivery	Symptoms	Operation on Diaphragm			Results (duration)
				Approach	Findings	Procedure	
Bisgard ⁴ 1947	1	M, 6 weeks Normal	Dyspnea, cyanosis on crying, poor weight	Thoracic (R)	Synchronous movement; muscular	Plication	One ICS* higher (5 months)
State ⁶ 1949	2	M, 6 weeks Forceps	Dyspnea, cyanosis on feeding poor weight	Abdominal (R)	Normal development	Suture to costal margin (Ant. & post.)	Normal (1 year +)
Butsch ⁷ 1950	3	F, 9 days Prolonged	Cyanosis on crying & feeding	Abdominal (L)	Muscle defect, posteriorly	Plication	One ICS* higher (1 year)
Shellito ⁸ 1951	4	M, 5 months Normal	Dyspnea on crying	Thoracic Abdominal (L)	Muscle defect, posteriorly	Resection & imbrication	Improved (1 year)
Koop ⁹ 1952	5	M, 7 weeks Normal	Dyspnea, cyanosis, hematemesis	Thoracic (L)	—	—	Recovered
Koop ⁹ 1952	6	M, 5 months	Fever, only	Thoracic (L)	—	—	Recovered
Koop ⁹ 1952	7	F, 13 months	Deformity	Thoracic (R)	—	—	Recovered
Arnheim ¹⁰ 1954	8	F, 8 days Forceps	Dyspnea, cyanosis	Abdominal (L)	Muscle defect, posteriorly	Plication & fixation to thoracic wall	Normal level (1 year)
Laxdal ¹ 1954	9	M, 1½ months Normal	Cyanosis, dyspnea	Thoracic (L)	Thin; membranous	Plication	Normal 6 months
DeBord ⁵ 1956	10	M, 13 months	Dyspnea, cyanosis	Thoracic (R)	Muscle on the periphery only	Resection & Imbrication	Normal (2 years)
Michelson ¹¹ 1961	11	M, 2 weeks Difficult	Dyspnea, cyanosis	Thoracic (R)	Membranous	Imbrication	Died** aspiration (one month)
Kadowaki ¹² 1963	12	F, 6 months	Coughing, vomiting (midgut malrotation)	Thoracic (L)	Muscle on the periphery, only	Plication	Improved
Kasai ¹³ 1965	13	F., 1 year	Coughing	Thoracic (L)	—	Plication	Improved
Kasai ¹³ 1965	14	F, 10 months	Cyanosis	Abdominal (L)	—	Plication	Improved
Kasai ¹³ 1965	15	M, 4 months	dyspnea	Abdominal (L)	—		Improved
Lundstrum ¹⁴ 1966	16	5 weeks Breech	Coughing, cardiac murmur	Bilateral two steps three months apart; left side, 8/64. Right side, 10/64.			Improved
Wu ¹⁵ 1966	17	F, 6 weeks Normal	Coughing, vomiting	Thoracic (L)	Muscle defect, anteriorly	Resection & Imbrication	Normal (3 months)
Author 1968	18	M, 12 weeks Normal	Dyspnea on crying	Thoracic (L)	Anterior muscle only	Plication	Normal (1 year)

*ICS—intercostal space.

**This patient had combined anomalies such as club foot, hypospadias and bilateral entropion.

ferable, because it allows better exposure and ease of repair except in the cases with an associated malrotation of the midgut. Of the reported cases, the thoracic approach was used in 11, the abdominal approach in 5, and the thoraco-abdominal entry in 1.

There are differences of opinion regarding the type of diaphragmatic repair. The most commonly used procedure is diaphragmatic plication or imbrication. Another procedure is excision of the diaphragm at the thinnest portion and approximation with either simple or overlapping suture of the edges; the latter would be preferable in cases of partial eventration.

Ten of the cases reviewed were repaired by plication or imbrication; 3 by resection of the thinnest portion, then imbrication, of the diaphragm; 1 case by suturing the diaphragm to the thoracic wall. In 4 cases the method of repair was not mentioned by the author.

Reinforcement of the diaphragm with tantalum mesh-gauze has been reported.¹⁹ It was felt that plication or imbricating suture would not strengthen the diaphragm adequately to maintain the correction.

Summary

Review of the literature on eventration of the diaphragm in infants has been undertaken.

A case of congenital eventration of the diaphragm in an infant is described.

The most common symptoms and signs of the condition were cyanosis and dyspnea, particularly upon crying or feeding. Unless the diagnosis is accurately made and early operation is undertaken, death may result.

Thoracic approach and plication of the

diaphragm is considered to be the most acceptable procedure for correction of the condition.

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We have reason to believe, if ships were well ventilated, had good store of fruits, greens, cyder, etc. laid in, and if proper regard were paid to cleanliness and warmth, that sailors would be the most healthy people in the world, and would seldom suffer either from the scurvy or malignant fevers, which are so fatal to that useful set of men; but it is too much their temper to despise all precaution; they will not think of any calamity till it overtakes them, when it is too late to ward off the blow.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines*, etc., Philadelphia, Richard Folwell, 1799, p. 279.

Effects of Certain Contraceptive Pills on Uterine Myomas

BRYAN C. WEST, JR., M.D.

The purpose of this paper is to review previous papers on the growth or change in size of uterine myomas in patients receiving estrogen and progesterone; and to determine if certain of the commonly used contraceptive pills did indeed cause their rapid growth.

Review of the Literature

In 1937 Nelson¹ described fibromyomatous nodules induced in the uterus of the guinea pig by the prolonged administration of estrogenic hormones. In 1939 Lipschutz² discussed the anti-tumorigenic action of progesterone. Work by Segaloff,³ in 1949 involved the daily intramuscular injection of 20 mg of progesterone or implanted progesterone in six patients with uterine leiomyomas. Treatment was continued for 30 to 189 days. The progesterone did not affect the size of the tumors, as demonstrated by contrast radiography. Nor was there microscopic evidence of increased involution in the leiomyomas removed at operation.

More recently studies have been carried out using the new progestins with or without added estrogens. In 1959 Andrews,⁴ in treating patients for endometriosis with norethynodrel with mestranol (Enovid), found myomas in 7 of 24 patients. The speed and degree of enlargement of the tumors during pseudo-pregnancy produced by Enovid was described as "marked." In 1961 Mixson,⁵ using norethynodrel, noted significant increase in the size of fibromyomas in 15 of 16 cases during amenorrhea-producing use of the drug. In 9 instances the degree of enlargement was described as "startling and disturbing." The course of treatment had varied from 4 to 20 weeks. In 1963 Casper⁶ also reported appreciable increase in size of myomas following continuous Enovid therapy for five months.

Studies using norethindrone or norethin-

drone acetate were carried out by Briscoe,⁷ who reported a case of acute hemorrhagic degeneration in a leiomyoma following only four days of use of the acetate form. Prakash and Scully⁸ found no detectable increase in size of a myomatous uterus in one patient who had taken norethindrone, 30 to 60 mg, daily for 14 months. Goldzieher⁹ showed that estrogen-free norethindrone in a daily dosage of 2 mg administered continuously for periods of one to three months had no effect on uterine myomas in 14 women. He also treated 46 patients with a pure progestin, medrogestone, for 21 days and evoked intense degenerative changes in both large and small myomas. These changes progressed to fibrosis and hyalinization. He suggested that brief, intense exposure to appropriate progestational agents has potentialities in the therapy of the myomatous uterus.

It seems to be generally accepted that uterine myomas grow under the direct influence of estrogenic substances. During the administration of the new progestins we are dealing with several factors in one compound which may influence the growth or change in size of myomas. For each progestin probably exerts some estrogenic effect, anti-estrogenic effect, progestational effect, and androgenic effect. The individual effects, or the relative predominance of some effect over others, are difficult or impossible to measure in any single progestin. The problem of determining the quantity and quality of these effects in a progestin is greatly compounded by the addition of estrogens, as in the combined contraceptive pills.

Case Report

In April, 1964, a multiparous Negro woman with an easily palpable firm nodule measuring 1.5 cm on the right anterior uterine fundus, requested, or rather insisted, that she be allowed to take contraceptive pills. She was told that these pills would probably cause the nodule to grow rapidly and could ultimately lead to surgery, although the myoma was at that time asymptomatic. She was started on a cyclic regimen of norethindrone with mestranol (Ortho-Novum) 2 mg. On a return visit one month later there was no significant change in the myoma. Two months later

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Table 1
Summary of Cases

Patient	Size and Condition of Uterus		Duration of Treatment (Months)	Pill
	Before Treatment	Last Examination		
1.	1965 pregnancy, 5-6 cm nodule; 1967 barely palpable nodule right cornu	Normal No irregularity	23	Ortho-Novum 2 mg
2.	Twice normal size Irregular	Normal No irregularity	16	Ortho-Novum 1 mg
3.	Increased AP diameter 1.5 cm nodule anterior fundus	Upper normal size No irregularity	48	Ortho-Novum 2 mg
4.	Upper normal size Increased lateral diameter	Normal No irregularity	42	Norlestrin 2.5 mg. (24 months) Ortho-Novum 2 mg (18 months)
5.	Increased AP diameter	Unchanged	3	Ortho-Novum 2 mg
6.	2-cm nodule anterior fundus	Unchanged	4	Ortho-Novum 2 mg
7.	1 cm nodule	Unchanged	24	Norlestrin 2.5 mg (12 months) Ortho-Novum 2 mg (12 months)
8.	1.5-cm nodule, right anterior fundus	Unchanged	60	Ortho-Novum 2 mg Ortho-Novum 2 mg
9.	10 weeks' gestation	12 weeks' gestation	11	Ortho-Novum 2 mg
10.	12 weeks' gestation Grossly irregular	10-12 weeks' gestation Grossly irregular	4	Ortho-Novum 2 mg
11.	10 weeks' gestation	12 weeks' gestation	18	Ortho-Novum 2 mg
12.	Twice normal size	Unchanged	8	Ortho-Novum 2 mg
13.	2-2.5 cm nodule	No irregularity	31	Norlestrin 2.5 mg

and at frequent intervals during the following year. no change at all was noted in the nodule or uterus.

Materials and Methods

At that time it was decided to try other patients with small asymptomatic leiomyomata uteri on norethindrone with mestranol (Ortho-Novum) 2 mg, and other contraceptive pills to see if rapid growth occurred as had been reported with the use of norethynodrel. Since that time 13 patients, 3 white and 10 Negro, aged 26 to 49 years, have been observed during cyclic treatment for periods ranging from three months to five years, for an average of 22 months. Eleven of the patients were treated with Ortho-Novum 2 mg. Three patients were given norethindrone acetate with ethinyl estradiol (Norlestrin) 2.5 mg, and one patient was given Ortho-Novum 1 mg. (Two patients had been changed from Norlestrin 2.5 mg to Ortho-Novum 2 mg.) Size of the uterus or myoma was estimated by bimanual pelvic examination only. Measurements by this method are inexact, and this limitation is hereby acknowledged. A

previous study using x-ray measurements was considered and the method rejected because of the failure of routine x-ray techniques to outline the uterine size, considered pertinent to this particular investigation.

Results

Of the 13 patients, there seemed to be a slight increase in size of the uterus in 2 patients, no change in uterine or nodule size in 6 patients, and a decrease in size in 5 patients. The two patients who showed a noticeable increase in uterine size had been on Ortho-Novum 2 mg for 11 and 18 months. In each, the pretreatment size was described as compatible with 10 weeks' gestation, and at the last examination as compatible with 12 weeks' gestation. In no patient was rapid growth or rapid increase in size observed.

Comment

It appears from the patients studied that Ortho-Novum 2 mg administered in a routine cyclic manner does not cause rapid growth of small uterine myomas and when

given over a long period of time may actually retard their growth. Norlestrin 2.5 mg, which like Ortho-Novum 2 mg, ranks high in progestational potency according to a classification used by Dickey,¹⁰ may also be proved safe for use in these patients. Continued investigation of these drugs is desired.

It may be noted from the table that 2 patients, numbers 4 and 5, did not show definite evidence of myomas. These two patients were initially eliminated from the study for this reason. They were later included, because they perhaps best represent the patient whom we see in the office requesting contraceptive pills, but for whom, after examination, we hesitate to prescribe them because of the strong suspicion of a small myomatous uterus.

Summary

Thirteen patients who had pelvic examinations indicating the presence of leiomyomata uteri were treated with three commonly used contraceptive pills containing norethindrone or norethindrone acetate for an average of 22 months. In only 2 patients was any increase in the size of the uterus

or nodules detected, and this increase was slight. In 5 patients the uterus or nodules appeared to decrease in size.

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In a discharge of blood from the nose, the great point is to determine whether it ought to be stopped or not. It is a common practice to stop the bleeding, without considering whether it be a disease, or the cure of a disease. This conduct proceeds from fear; but it has often bad, and sometimes fatal consequences.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicine*, etc., Philadelphia, Richard Folwell, 1799, p. 240.

Megaloblastic Anemia Precipitated by the Use of Oral Contraceptive

A Case Report

ROBERT P. HOLMES, M.D.

Although folic acid-responsive megaloblastic anemia as a complication of pregnancy has long been recognized, its etiology has remained a subject of speculation.¹ The recent discovery of patients with this type of anemia in association with the use of oral contraceptives² (which produce a pseudo-pregnant state) is of interest, therefore, not only as evidence of another complication of the use of these drugs, but also as a possible clue to the etiology of the megaloblastic anemia of pregnancy. The case reported below represents an example of this association.

Case Report

A 31-year-old woman was admitted to the Craven County Hospital May 8, 1967, with the chief complaint of fatigue. She had experienced generalized malaise, a 20-pound weight loss, and increasing fatigability for the preceeding six months. Two weeks before admission she learned from her referring physician that she was anemic and began taking an oral iron preparation, with no apparent benefit. Her only other recent medications were an antihistamine prescribed for episodes of bronchial asthma and an oral contraceptive, norethindrone acetate and ethinyl estradiol (Norlestrin), which she had taken regularly since 1964 (three years). Her past medical history included an episode of pneumonia in 1963 and anemia in association with each of her two pregnancies (1957 and 1962). During each of these pregnancies supplemental iron was prescribed with good results. No transfusions were administered. She reported eating a normal diet and denied the use of alcohol. There was no family history of hematological diseases.

Physical examination

The physical examination revealed a very

pale, normally developed, young white woman. The blood pressure was 130/70 and the pulse rate 120 per minute. There were several large ecchymoses on the extremities. A soft systolic bruit was audible at each orbit and over the left carotid artery. Inspiratory and expiratory rhonchi and wheezes were heard throughout both lungs. A grade II/VI ejection murmur and a grade I/VI early diastolic blow were heard along the left sternal border. No other abnormalities were noted.

Laboratory findings

The hematocrit value was 14%; hemoglobin, 4.7 gm/100 ml; white cell count, 4,900/cu mm. A smear of the peripheral blood indicated a normal differential white cell count, red cells that appeared macrocytic, and hypersegmentation in the nuclei of the polymorphonuclear cells. The reticulocyte count was 1.1%. Platelet counts ranged from 44,000 to 111,000 per cubic millimeter during the next two days; total bilirubin was 0.8 mg/100 ml with a direct bilirubin of 0.1 mg/100 ml; serum albumin, 3.3 gm; and serum globulin, 1.9 gm/100 ml. The diagnox blue reaction was consistent with secretion of acid by the stomach; the direct Coombs test was negative. A stool specimen contained no occult blood and no ova or parasites. The L. E. preparation was negative. Sternal aspiration revealed megaloblastic marrow with the presence of hemosiderin within the reticuloendothelial cells and a reduction in the number of megakaryocytes. A urine test for formiminoglutamic acid showed 15 mg excreted in 24 hours (normal, less than 3 mg/24 hours).

X-ray films of the chest, upper gastrointestinal tract and small bowel were all normal. A Schilling test showed no defect in vitamin B-12 absorption, with 14.3% of the administered cobalt 57 being recovered from the urine.

Course

The oral contraceptive drug was discontinued. After the foregoing studies the patient was given 2 units of fresh whole blood and started on a regimen of folic acid, 5 mg daily by mouth. Reticulocytosis (21.7%) subsequently developed, and the platelet count increased to 153,000/cu mm. The hematocrit was 27% at the time of discharge and 40% on June 20, 1967. The patient felt remarkably improved. The administration of folic acid was discontinued on September 15, 1967, but regular determinations of the hematocrit and white cell count to the time of this writing have remained normal. On February 22, 1968, urine was again obtained for a formiminoglutamic acid determination, and showed 2.0 mg excreted in eight hours. The test was repeated once more on June 27, 1968 after histidine-loading and revealed 40 mg excreted within eight hours (mean normal for histidine loading—4 mg/8 hours).

Discussion

In a careful investigation of five patients taking oral contraceptives who had megaloblastic anemia and severe folate deficiency, Streiff² found an abnormality of intestinal absorption of the dietary form of folate (polyglutamic folate) but no significant impairment of absorption of the pharmacologically available form—monoglutamic folate. It is postulated that this malabsorption of folate is a result of the inhibitory action of oral contraceptives on the intestinal enzyme folate conjugase, as has been shown to occur in the folate deficiency produced in some patients by diphenylhydantoin.³

An investigation by Shojania and others⁴ of 86 women—24 normal controls and 62 taking oral contraceptives—disclosed generally and significantly lower serum folate levels in subjects taking oral contraceptives. It would seem unlikely that megaloblastic anemia would develop from the use of oral contraceptives alone. Instead, they are more likely a contributing factor in individuals

having some nature of underlying "occult malabsorption."⁵ Two such patients have been reported who had malabsorption of folic acid, normal fat absorption (I 131) and an abnormal jejunal biopsy compatible with nontropical sprue.⁵

The case in the present report would seem to represent an example of such a situation. The patient displayed typical severe megaloblastic anemia responsive to folic acid therapy, with normal vitamin B-12 absorption, which developed after she had been taking an oral contraceptive for 3½ years. That she has maintained a normal hematocrit for two years since discontinuing oral contraceptives—the folic acid having been discontinued after four months of treatment—seems to implicate the role of the oral contraceptives in the genesis of her anemia. It is particularly interesting that she still gave evidence of an underlying folic acid malabsorption on the basis of an abnormal urinary excretion of formiminoglutamic acid after histidine loading when tested again one year later. This finding would be consistent with the foregoing concept of oral contraceptives producing megaloblastic anemia in individuals who have some underlying cause of folate deficiency.

Summary

A case is presented of folic acid-responsive megaloblastic anemia precipitated by the use of oral contraceptive in a patient with a pre-existent folic acid deficiency. The etiological aspects of this complication are discussed.

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Spontaneous Rupture of a Branch of the Uterine Artery

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Intra-abdominal hemorrhage is an unusual and serious complication of pregnancy. When this event occurs during late pregnancy or labor, the danger to the patient is greatly increased. The following is a case of report of hemorrhage occurring from a very rare source in late pregnancy.

Case Report

The patient was a 35-year-old white woman, gravida 3, para 2, whose estimated date of confinement was October 10, 1965. Her past medical history indicated good general health. She had had no operations except a tonsillectomy. She had had two full-term deliveries, both uncomplicated. Her children were aged six and eight years.

The patient was now at 38 weeks' gestation and had last been seen in the office three days prior to admission. At that time her blood pressure was 110/80; hemoglobin, 13.7 gm/100 ml; urinalysis, negative. The fundus measured 30 cm above the symphysis, and fetal heart tones were 160/minute in the left lower quadrant.

On the day of admission she was having no contractions and was going about her normal activities when she suddenly began to have severe generalized abdominal pain. She experienced several episodes of syncope while being taken to the hospital, where she arrived at about 5 P.M. Her blood pressure was then 80/50 and the pulse rate 90. The abdominal examination revealed a term-size intrauterine pregnancy, vertex presentation, with a good fetal heart rate of 140 beats per minute in the left lower quadrant. There was a moderate amount of tenderness on examination of the abdomen, but no rebound tenderness could be elicited. Bowel sounds were present and hypoactive. Uterine contractions lasting 20 to 30 seconds were now occurring every three to four minutes, and between contractions the uterus was relaxing well

and showing no signs of uterine tetany. There was no vaginal bleeding, and a vaginal examination at this time revealed the cervix to be dilated (2 cm) and soft. The membranes were intact. The vertex was at 0 station.

The patient's hematocrit was 35%, the hemoglobin 12.6 gm/100 ml, and no protein was found in the urine.

The membranes were ruptured and an intravenous infusion of 5% dextrose and water with 1 ml of Pitocin per 1000 ml was begun. Blood was typed and crossmatched, and a transfusion of whole blood was begun as soon as it was available. During this period the blood pressure remained about 80/50 and the pulse rate 90. Labor progressed well, and the uterus remained relaxed between contractions. The fetal heart tones remained steady at 140 beats per minute.

The patient was delivered of a 6 pound, 6½ ounce female infant at 8:10 P.M. The infant was delivered with elective low forceps and had an apgar of 10 at one minute. The placenta was delivered at 8:15 P.M. and showed no evidence of abruption. The uterine cavity was explored and found to be intact. Postpartum bleeding was estimated to be 150 ml, and at this time, with a blood transfusion in process, the blood pressure was 100/70 and the pulse rate 90. The patient had received 50 mg of Demerol during labor and a pudendal block at delivery. She was awake and co-operative throughout. Twenty minutes following delivery, while she was receiving a second unit of whole blood, her blood pressure dropped to 60/40. Re-examination showed no excessive vaginal bleeding, nor was there any evidence of external blood loss. The abdomen was becoming slightly distended, with some increased rebound tenderness.

The patient was moved to the operating suite and a celiotomy was performed. Approximately 2500 ml of blood was found free in the abdominal cavity, and a small ascending branch of the left uterine artery

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was actively bleeding through the posterior leaf of the broad ligament into the peritoneal cavity. This bleeding was controlled with multiple figure-of-eight sutures. The remainder of the pelvic organs were found to be in good condition. Exploration of the upper part of the abdomen revealed no abnormalities.

This patient's postoperative course was uncomplicated except for some superficial thrombophlebitis of the right arm at the site of an intravenous infusion. She received an additional unit of whole blood during hospitalization, making a total of three transfusions. Repeat laboratory work on the third postpartum day showed a hemoglobin value of 10.2 gm and a hematocrit of 32%.

Summary

Intra-abdominal hemorrhage in late preg-

nancy is an infrequent occurrence associated with high maternal mortality. Any part of the intra-abdominal vascular tree can conceivably be responsible for such hemorrhage, and in fact most of these vascular channels have reportedly been implicated. Spontaneous rupture of pelvic veins during pregnancy accounts for the largest proportion of reported cases. Spontaneous rupture of a branch of the uterine artery apparently is much less common, since there has been only one previously reported case in the English literature.¹ In both the present case and the previously reported one, celiotomy was performed and the mother and infant survived.

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Your College Pre-entrance Medical Examinations— Fact or Farce

HUGH A. MATTHEWS, M.D.

Apparently some people across the nation question whether college pre-entrance medical examinations are indeed fact or farce. Studies made at the University of Rochester¹ would lead the director of health affairs to regard pre-entrance reports by off-campus physicians more as farce than fact. Subsequent studies at the University of California, Santa Barbara,² tends to restore confidence in the records traditionally depended upon by medical personnel on the college and university campuses.

In the Rochester study, 100 students were interviewed. Twelve had not been examined at all. Forty-four had removed no clothing for the examination. Seventy-two gave no history. Only 62, reportedly, were screened for tuberculosis and only 54 had urinalysis. Only eight had up-dating of smallpox, tetanus, and typhoid immunizations. Only ten, again reportedly, had received a comprehensive examination.

From the study at Santa Barbara, conclusions were drawn from a detailed ques-

tionnaire completed by 1,000 students, 500 men and 500 women, who had obtained off-campus physical examinations. Three-fourths of these students had been previously examined by the physician who did the pre-entrance physical, and only 8% were examined by governmental agencies.

Editorial Comment on Page 27

This university gained confidence in off-campus records from studies in the fall of 1965, and the confidence was confirmed in the fall of 1966. Results from student evaluation in 1,000 unsigned questionnaires are shown, in part, in Table 1.

Student Evaluation of	Pre-entrance Examinations, ₂			
	Fall 1965		Fall 1966	
	Men	Women	Men	Women
	%	%	%	%
Not really examined	0.2	0.4	0	0
No clothing removed	1	4	1	4
Urinalysis done	83	85	65	86
Comprehensive examination	61	60	61	64

These findings led the University at Santa Barbara to adopt a policy that, beginning

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in the fall of 1967, all pre-entrance examinations would be performed by off-campus physicians with the exception of specialized categories such as varsity athletes and the economically deprived.

From Family Physician to University Health Director

During the winter of 1969, prior to publication of the Santa Barbara project, I read the article from Rochester. A family doctor in Haywood County at the time, I was contemplating accepting a position as Director of Health Affairs at Western Carolina University. I did some soul-searching and some "mini-search."

Having assumed the position, in March, 1969 I readily found in the University files 20 pre-entrance forms that I had completed with never a thought of being at Western Carolina University. These 20 records I checked against charts at Midway Medical Center. These 20 students likely would have reported the following results:

	No.	Percent
Not really examined	5	25
No clothing removed	10	50
Urinalysis done	10	50
History taken	0	0
Comprehensive examination	1	.05

Since, in a sense, the above data could be regarded as true, were my own records before me at Western Carolina University a farce?

Five students were not really examined at the time recorded. The students or parents dropped the forms at the office, the nurse filled them out, and I signed them. These five young people I had delivered and seen monthly to yearly for about 18 years. Without exception, they had had their immunizations as recommended by the American Pediatric Society. Urinalysis had been done yearly or oftener.

No clothing had been removed from these five and five others. The five others had on few clothes. Within the preceding three months they had been completely examined during one or more visits. Complete physicals at Midway Medical Center are frequently done on repeated visits because of the patient load.

Ten patients had urinalyses at the time of the pre-entrance physical. Ten others, asymptomatic, had had urinalyses within the past three months.

Medical histories? Had the patients given more than the chief complaint and present illness, I would not have listened. I would have read on their charts before me their health records since birth.

Comprehensive examinations? At the time of the pre-entrance examination one young person may have had a going over that would have given the impression of being comprehensive. Pelvic examination, first refused, was done to the obvious delight of the student on learning that she was a perfectly normal young lady. None of the others felt they were cheated; neither did I.

I did feel that the Director of Health Affairs was cheated. He was also more handicapped in the management of his patients in his present role of *in loco parentis* than his former role of *in loco medici*.

The result of one VDRL was recorded but not the date.

The date of one VDRL was given but not the results.

One tuberculin test was positive, the date of chest x-ray noted, but not the findings.

Vision in one case was recorded as normal, but no mention was made of contact lenses.

One student had been treated repeatedly during holidays and had had a complete urological work-up, but no information had been sent to the University Health Center.

Another student had had detailed studies for polycythemia, but no interim history had been provided the health service.

One girl reacted repeatedly to unusual stress with hysterical behavior, but the significant history had not been volunteered.

The 20 case records reflected no sins of commission against the student but sins of omission against the campus physicians. Indications were that the family doctor, now primarily interested in student health, did not appreciate the importance of pre-entrance physicals in the university health center.

Were I to return to the role of a personal

physician, I would do a better job for my student patients. I would be more accurate in reporting the data requested. It is used. I would volunteer more information. This is needed.

I would submit significant interim data and make use of the university physicians in the management of my patients. The university physicians want, need, and will use the information and cherish the opportunity to help the personal physician in the student's home community.

Conclusion

After reviewing about 5,000 student medical records at Western Carolina University and communicating with college health directors throughout the state, I am left with two personal feelings in my dual relatedness. My medical records are about on a par with those of other physicians throughout the state, and I share with other health directors appreciation for and confidence in the local medical doctor.

Even so, it is reasonable to conclude that the local physicians and college physicians could be more mutually helpful, in the in-

terest of the students on North Carolina campuses. The local doctor could be more thorough in reporting his pre-entrance physical examinations and histories.

The university physician certainly needs to relay significant health data, collected on the campus, to the students' personal physicians.

Establishment of lines of communication appears desirable if not urgent. College and university physicians might contribute more articles to the NORTH CAROLINA MEDICAL JOURNAL and other publications. Consideration might be given to forming a student health section of the North Carolina Medical Society. Colleges and universities might well host local and regional medical meetings on the state campuses. All physicians would enjoy a visit to the health services of their alma maters. Doubtless this would contribute to rapport and mutual helpfulness.

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Training in Transportation of the Injured in North Carolina

GEORGE JOHNSON, JR., M.D.

This paper is a brief review of the progress made in the training of ambulance attendants in North Carolina and an appeal for support in the continuation of this program.

Background

A concentrated statewide effort to train ambulance attendants began in 1960, at the instigation of Drs. Christian Siewers, John Morris, and Walter Hunt. Beginning in 1961, under the auspices of the North Carolina Committee on Trauma and the North Carolina Chapter of the American College of Surgeons, with funds supplied by the North Carolina Association of Insurance Agents,

one-day ambulance schools were held throughout the state. During the next five years more than 1,000 students were trained in 22 schools held in cities in all sections of the state. This experience demonstrated that one-day schools consisting primarily of demonstrations and lectures did not provide adequate training for ambulance attendants.

In 1965 a Rescue Squad Institute was established on the campus of the University of North Carolina in cooperation with the North Carolina Department of Insurance and the North Carolina Association of Rescue Squads. The instructors for this school were drawn not only from the faculty of the University of North Carolina School of Medicine, but also from physicians in private practice within the state. The students received either basic or advanced first-aid training in an in-

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tensive two-day program of continuous instruction. They were all enthusiastic and receptive regarding the content of the course.

The problem with this early type of endeavor was the long distance some of these people had to travel for their training. In 1966 it was realized that this problem could be solved by drawing on the resources of the 50 community colleges scattered throughout the state, each having the faculty and curriculum specialists available for offering this type of instruction. A curriculum was developed, and the first school was held in Durham, demonstrating by its success the feasibility of this endeavor.

Development of the Present Training System

In 1967, the North Carolina Legislature passed a law requiring the ambulance services in the state to meet minimum standards of equipment and personnel training. The State Board of Health, on being called upon to administer the law, formed an Advisory Committee composed of representatives of appropriate agencies. The community colleges were asked for assistance in setting up the training programs, which consisted of eight three-hour lessons. These courses have usually been conducted over an eight-week period, with local physicians and other qualified personnel serving as instructors.

One of the important facets of the program was the appointment of an overall coordinator for the State Board of Health, the students, the community colleges, and the ambulance concerns. Mr. Ben Shepard, who currently fulfills this job, recently reported that 285 providers of ambulance services in North Carolina had been approved as of May, 1969. They include 116 funeral homes, 77 rescue squads, 2 ambulance firms, and 3 governmental firms. There are 521 approved ambulance vehicles in North Carolina. Thirty

ambulance training courses have been conducted by the Department of Community Colleges, resulting in the certification of 1,538 ambulance attendants. Approximately 3,400 ambulance certificates have been issued, some of these, of course, having been issued after the attendants passed standard and advanced first aid courses.

Although the instruction offered in these courses varies from institution to institution, the uniform curriculum makes the instruction relatively standard and consistently good. The level of instruction must fit the students. In the early part of the program, some physicians had difficulty in expressing themselves to the students, but as the students have learned medical terminology, this problem has disappeared. Facilities must be provided for practical demonstration of the methods taught. Physicians must participate in the instruction as an added stimulus to the personnel and to let ambulance attendants know the medical profession is interested in what they are doing. There must be continued interest in methods of evaluation of the student's ability. The instruction obviously must be repeated at frequent intervals under the guidance of medical personnel.

Thus we solicit your cooperation in this program. It is felt that concentrated efforts by the physicians of this state on the local level will continue to improve the proficiency of the ambulance attendants. It is suggested that we offer constructive criticism of their work and also recognize the effectiveness of the job that they are doing.

Conclusion

In North Carolina we are demonstrating to the nation a method of training ambulance attendants. The strides made in the past decade have done much to insure optimum care from the time of an accident until the victims reach professional medical care.

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
OCTOBER 1969 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE				NONWHITE				COUNTY	WHITE				NONWHITE			
	Perinatal Deaths		Total Deliveries Nov. 1968 - Oct. 1969	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Nov. 1968 - Oct. 1969	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries Nov. 1968 - Oct. 1969	Perinatal Rate Per 1,000 Deliveries				
	October 1969	November 1968 - October 1969			October 1969	November 1968 - October 1969		October 1969		November 1968 - October 1969	October 1969		November 1968 - October 1969				
NORTH CAROLINA	162	1858	67279	27.6	111	1348	27892	48.3									
ALAMANCE	1	32	1344	23.8					PENDER		6	133	45.1		5	139	36.0
ALEXANDER	3	14	377	45.6	3	22	447	49.0	PERQUIMANS			61		1	2	54	54.0
ALLEGHANY		5	138	36.2					PERSON	1	9	279	32.3	2	9	201	44.8
ANSON		5	163	30.7	1	15	305	49.2	PITT	2	21	756	27.8	3	21	649	47.8
ASHE		9	311	28.9			3		POLK		2	126			2	40	
AVERY		7	245	28.6			3		RANDOLPH	2	21	1235	17.0		5	153	30.2
BEAUFORT	1	11	388	28.4		13	236	56.1	RICHMOND	3	20	482	41.5	2	17	299	56.9
BERTIE	3	6	102	58.8	3	13	272	47.8	ROBESON	5	20	573	34.9	3	61	1384	44.1
BLADEN		5	228	21.9	1	9	204	44.1	ROCKINGHAM	1	34	1005	33.8	1	18	417	43.0
BRUNSWICK	2	9	270	33.3		7	161	43.5	ROWAN	1	28	1102	25.4	2	19	313	60.0
BUNCOMBE	3	63	2050	30.7	10	250	250	38.6	RUTHERFORD	2	18	749	24.0		9	141	63.9
BURKE	4	33	988	33.4		4	85		SAMPSON	1	12	381	31.5	2	24	331	72.5
CABARRUS	1	28	1050	26.7	4	18	279	64.5	SCOTLAND	3	13	299	43.5	1	14	278	50.4
CALDWELL	1	40	1135	35.2	1	6	94		STANLY		25	589	47.4		5	128	20.1
CAMDEN		1	50				32		STOKES	1	11	294	37.4		1	46	
CARTERET	1	15	544	27.6		1	74		SURRY	4	35	886	39.1		5	65	
CASWELL		4	137		2	11	144	66.3	SWAIN		3	107			1	58	
CATAWBA	4	35	1509	23.2		7	212	33.0	TRANSYLVANIA	3	13	399	47.1		1	19	
CHATHAM	1	3	324		1	8	181	44.5	TYRRELL			30			2	30	
CHEROKEE		4	308			2	13		UNION	2	21	711	29.8	1	9	267	33.7
CHOWAN	1	1	84			4	85		VANCE		9	325	27.0	3	25	333	67.0
CLAY		5	91						WAKE	5	66	3030	21.8	5	67	1181	56.7
CLEVELAND	2	26	959	27.1	1	22	423	50.0	WAPLEN		2	59		1	6	155	38.7
COLUMBUS		12	524	22.9	2	12	373	32.2	WASHINGTON		5	118	47.4		11	169	65.1
CRAVEN	7	34	1217	27.9	2	25	368	67.9	WATAUGA	1	11	375	29.3			4	
CUMBERLAND	11	110	3701	29.7	8	61	1318	48.3	WAYNE	1	24	1049	23.5	3	33	545	60.6
CURRITUCK			53			1	21		WILKES	1	24	788	30.6			54	
DARE		1	114				12		WILSON	1	13	533	24.4	1	27	582	46.4
DAVIDSON	2	42	1453	28.9	3	11	255	43.1	YADKIN	2	10	362	27.6		2	37	
DAVIE		5	273	18.3		4	63		YANCEY		6	294	29.4			7	
DUPLIN	1	10	367	27.2	1	13	280	45.0	CITIES								
DURHAM	3	31	1440	21.5	1	23	935	36.3	City totals are also included in county totals.								
EDGEcombe	1	8	420	19.0	1	26	549	47.4	ALBEMARLE		4	153			3	45	
FORSYTH	3	75	2753	27.2	3	63	1149	54.9	ASHEVILLE		23	775	31.2		8	222	36.0
FRANKLIN	1	6	188	31.8		13	259	50.2	BIRLINGTON	1	12	583	20.6	1	6	137	45.8
GASTON	3	64	2519	25.4	3	26	490	50.1	CHAPEL HILL	1	6	320	18.8		6	52	
GATTS	1	1	39			5	87		CHARLOTTE	6	77	3156	24.4	9	76	1911	39.8
GRAHAM	1	1	101				14		CONCORD		8	219	36.5	3	9	100	90.0
GRANVILLE	1	6	222	27.0	1	15	355	42.3	DURHAM	3	10	938	20.7	1	30	813	36.9
GREENE	1	3	95			6	151	39.7	EDEN		5	248	20.2		4	68	
GUILFORD	10	113	3792	29.8	6	78	1598	49.8	ELIZABETH CITY	1	2	162			4	90	
HALIFAX		7	404	17.3	2	26	586	44.4	FAYETTEVILLE	4	33	1004	30.9	1	27	577	46.8
HARNETT		21	550	38.2		14	339	41.3	GASTONIA	2	23	857	26.8	1	10	207	49.3
HAYWOOD	3	20	684	29.2		2	16		GOLDSBORO		8	316	26.3		16	255	60.2
HENDERSON	1	25	698	35.8			40		GREENSBORO	4	48	1803	26.6	5	42	924	45.5
HERTFORD	3	8	131	61.1	3	22	252	87.3	GREENVILLE		11	335	30.6		6	196	30.6
HOKP	1	2	109			4	210		HENDERSON		5	131	34.0	2	10	144	61.0
HYDE		1	40			3	40		HICKORY	3	13	341	38.1		3	92	
IREDELL	1	31	933	33.2	1	20	306	65.4	HIGH POINT	2	27	800	33.8	1	21	435	48.3
JACKSON	1	8	293	27.3		1	56		JACKSONVILLE		8	408	18.6		2	49	
JOHNSTON	1	25	754	33.2	1	16	315	50.6	KINSTON	1	5	291	17.2		9	232	38.9
JONES		1	70			2	67		LENOIR		5	220	27.0		2	49	
LEE		4	304		1	8	165	49.5	LEXINGTON	1	9	280	32.1		4	91	
LENOIR	1	12	601	20.0	1	20	467	44.7	LUMBERTON		2	219		1	13	196	67.8
LINCOLN	3	13	523	24.9		6	90		MONROE		4	139			4	68	
MCOWELL	1	19	533	35.6	1	2	36		NEW BERN	1	4	171		1	6	115	69.6
MACON		8	211	37.9		1	7		RALEIGH	2	39	1575	24.8	4	43	685	70.1
MADISON	1	6	240	25.0			2		REDSVILLE		6	164	30.4		4	101	
MARTIN	1	7	197	35.5	1	19	254	74.8	ROANOKE RAPIDS		5	183	27.3		2	35	
MECKLENBURG	10	116	4874	24.1	12	87	2217	29.2	PACIFY MOUNT F		1	104	10.4		10	155	50.0
MITCHELL		3	214				2		ROCKY MOUNT N	1	5	230		1	11	90	
MONTGOMERY	1	5	249	20.1		5	116	43.1	SALISBURY		4	190		1	7	132	53.0
MOORE	3	21	486	43.2		12	244	49.2	SANFORD		3	174			2	64	
NASH	2	13	549	23.7	5	28	520	57.8	SHELBY	2	5	204	24.5	1	6	114	52.6
NEW HANOVER	3	7	1152	26.0		16	412	38.8	STATESVILLE		9	259	24.7	1	8	128	57.5
NORTHAMPTON			99		1	11	277	23.7	THOMASVILLE		6	184	48.9	3	6	104	67.2
ONSLow	8	58	2149	27.0	1	23	416	55.5	WILMINGTON		14	583	25.7		12	335	35.5
ORANGE	2	20	882	22.7	2	11	239	46.0	WILSON	1	8	289	27.7	1	14	274	50.0
PAMLICO		2	78			3	60		WINSTON SALEM	2	26	1429	25.2	2	65	1040	54.7
PASQUOTANY	1	7	286	24.5		8	176	45.5									

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

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JANUARY, 1970

SUGGESTIONS FOR AUTHORS

The NORTH CAROLINA MEDICAL JOURNAL welcomes original contributions to its scientific pages, expecting only that they be under review solely by this JOURNAL at a given time, and that they follow a few simple guidelines. The guidelines are as follows:

1. Subject Matter

Educational articles, especially those in which particular applications to the practice of medicine in North Carolina are developed, are one of the main objectives of this JOURNAL.

Articles reporting original work by North Carolina physicians are invited, whether the work is done in a clinic, a laboratory, or both. The editor

and his consultants will evaluate the work by the usual criteria, including a proper discussion of previous work, control observations, and statistical tests where indicated.

Historical articles, especially those dealing with local history, are considered of real value and interest.

2. Manuscripts

An original and a carbon copy of the manuscript should be submitted, one for review by the editorial staff, the other by referees. The manuscript should be typed on standard-size paper, double-spaced, with wide margins (one inch on each side).

3. Bibliographic References

References to books and articles should be indicated by consecutive numerals throughout the text and then typed, double-spaced, on a separate page at the end of the manuscript. Books and articles not indicated by numerals in the paper should not be included.

References will be much more valuable to the reader if they are given in a uniform style and contain the full information necessary to locate them easily. Henceforth, this JOURNAL will follow the modified form introduced by the JAMA in the issue of Jan. 5, 1970. The information will continue to include the author's surname and initials, title of the article, name of the periodical, inclusive page numbers, and date of publication—omitting, however, the month (or week). The major changes are these: punctuation is reduced to a minimum; in titles of journal articles, only the initial word is capitalized; when there are four or more authors, the first three names are given, followed by "et al."

4. Tables and Illustrations

Tables and legends for illustrations should be typed on separate sheets of paper. The illustrations should be glossy black-and-white prints or line drawings. It is necessary to obtain permission from the author or publisher to reproduce illustrations which have been published elsewhere.

The North Carolina Medical Journal pays up to \$20 on the cost of cuts for any one article. This amount usually covers the expense of reproducing from two to five illustrations, depending on the size and type of cuts required. Line drawings and graphs are usually less expensive to reproduce than photographs. Authors may publish additional illustrations by paying the extra cost.

5. Style

The style followed by this JOURNAL will be, in general, that outlined in the Style Book issued by the Scientific Publications Division of the American Medical Association, John H. Talbot, M.D., director. All manuscripts are subject to editorial revision for such matters as spelling, grammar and the like.

By following the above suggestions, writers will greatly expedite the publication of papers accepted by the North Carolina Medical Journal.

THE AMA CLINICAL MEETING

The 1969 AMA meeting convened in mile-high Denver, Colorado, in the shadow of snow-capped Rockies. Attendance included a score of members from North Carolina, representing either the Medical Society and staff or the Auxiliary.

The North Carolina delegation held a breakfast conference each morning to coordinate its activities, receive reports, and determine specific action on issues before the House of Delegates. The House of Delegates agenda included recommendations from ten reference committees encompassing 17 reports from the Board of Trustees, an equal number from Councils and Committees, and 65 resolutions and memorials. One of the latter memorialized Elias Faison, who represented North Carolina in the AMA House of Delegates from 1956 until his death.

The report of the Committee on Health Care of the Poor was approved and referred to the Board of Trustees for immediate implementation. This report, representing 18 months of study, reaffirms existing policy and proposes new approaches to health care problems in areas of critical need. One item suggesting a change in the draft law to permit military credit for service in areas of civilian need was referred for study to the AMA's Council on National Defense, headed by North Carolina's George Paschal.

A resolution to support the repeal of state abortion laws to permit abortion upon request if performed by a qualified physician drew a large attendance at the Reference Committee hearing. Testimony weighed heavily in opposition to the proposal. It was rejected by the House of Delegates, reaffirming the AMA's present policy to which North Carolina's recently liberalized law conforms.

The need for closer liaison with medical students, interns and residents, particularly through SAMA, at the local, state and national levels, was stressed, receiving emphasis in President Gerald Dorman's address to the House. It was noted that Colorado has established a student unit comparable to a county society. A proposal relating to

expanded student membership privileges in our State Society, referred to editorially in the November issue of this Journal, will be brought by the Executive Council to the House of Delegates in May.

The AMA House of Delegates reaffirmed support of all forms of training in nursing and stressed the need for further development and expansion of diploma schools of nursing.

The report of the Committee on Planning and Development containing 57 recommendations and a minority report offering 19 recommendations were received by the House of Delegates. An Ad Hoc Committee on Planning was established to study the report and bring proposals for implementation to the Annual Meeting in June, 1970. North Carolina will be represented on this committee by Amos Johnson.

Many other items of importance, but perhaps of lesser note, may be found in AMA News releases.

J.S.R.

* * *

HOW TIRED DOES TIRED BLOOD HAVE TO BE?

The U. S. public would probably agree that having iron deficiency anemia is bad for you, and apt to result in chronic fatigue, loss of zest, and a generally crepuscular view of life. This is what they see in the television patent medicine ads, and it is also what most of their doctors believe. It is therefore interesting to note what happened when Elwood and his associates¹ surveyed 880 women in a Welsh community for the presence of iron deficiency anemia and the most common symptoms said to be associated with such anemia by medical textbooks. In addition to questions directed toward anemia "symptoms," a crude rating of psychoneurotic tendencies was made, and then the whole anemic (hemoglobin 8-12 gm%) group was treated with either iron or a placebo. In addition, a group of women with normal hemoglobin levels, but complaining of symptoms similar to those said to accompany iron deficiency, were given either iron or a placebo.

The results of the trials were sobering.

There was no correlation between the complaints of the 880 women and their hemoglobin levels except for palpitation, which was present more often as the hemoglobin level *increased*! Irritability, palpitation, dizziness, breathlessness, fatigue and headache, the symptoms under study, did correlate positively with the psychoneurosis grading, although the correlation coefficients were low. In the anemic group and the group with symptoms but no anemia, the complaints responded equally to iron and a placebo, even though there was a mean increase of over 2 gm in the hemoglobin levels of the anemic patients during the eight weeks of "treatment."

The authors suggest that on the basis of reported cases, hemoglobin levels probably have to be below 7 gm% before circulatory changes result. Even then, most experienced physicians can relate anecdotes about hard-working patients with hemoglobin levels much below 7 gm%. The rapidity with which anemia develops, as well as the personality of the patient, have much to do with the development of symptoms. Probably not enough physiologic testing has been done to be sure of the level at which objective evidence of circulatory impairment is found.

The implications of the Welsh study are many; they certainly should temper enthusiasm for too-eager treatment of iron deficiency with parenteral iron preparations or, even worse, with blood transfusion. They should put physicians on notice that the reason certain people with low hemoglobin levels feel bad is because of the disease that made the hemoglobin levels low, not the anemia as such. And perhaps most discouraging is the reminder that what makes most of us feel bad has nothing to do with our hemoglobin or our blood sugar or what—not else by way of measurable characteristics—it is our personalities and our circumstances, and there are no really good drugs for them.

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ON FACTS AND FARCES

If our grandest of all nations is ever brought low it will be due, in part at least, to our indisposition to do an honest day's work for a day's pay. We can see this shortcoming in the artisan and the craftsman; we decry it in the journeyman and the common laborer. But does our jeremiad extend even to the ranks of our professional colleagues?

H. A. Matthews, M.D., goes to the wailing wall in the matter of college pre-entrance medical examinations. Having purged himself with hyssop, he exhorts his fellow physicians to become henceforth true believers. Read him, on page 20, and go and sin no more.

MILLARD P. BETHEL, M.D., M.P.H.

* * *

CONGENITAL EVENTRATION OF THE DIAPHRAGM

The word eventration derives from the Latin meaning "out of the belly." As pointed out by Dr. Lee's paper on congenital eventration of the diaphragm in this issue of the *Journal*, the bowels do appear out of the belly and in the chest by x-ray, but they are still within the abdominal cavity beneath the thin, high-domed diaphragm and do not protrude through any hole in it. Dr. Lee makes the point that some of these infants get into respiratory difficulty and require plication of the diaphragm. Although he reports only a few cases coming to surgery, apparently the condition can exist without significant symptoms as attested by an incidence of 1 in 10,000 films in mass x-ray surveys of adult chests. Eventration can be acquired and can occur in infancy secondary to birth injury of the brachial plexus and phrenic nerve. The congenital variety may not become evident until an acute respiratory infection is superimposed.

The much more common and more urgent problem in infancy is that of a diaphragmatic hernia in which all of the small bowel, half of the colon, and often the spleen are within the left chest cavity through a defect in the diaphragm. Soon after birth the bowel becomes filled with air, not only compressing

the left lung, but also displacing the mediastinum to the right so far that the right lung is also compromised. Within a few hours the infant can become extremely tachypneic and cyanotic. Even positive pressure endotracheal ventilation will not pink-up some of these babies until the hernia is reduced. Should one try to do this as an emergency procedure through a thoracotomy incision, he will have extreme difficulty because of the distended nature of the bowel, the relatively small hole in the diaphragm, and the small size of the abdominal cavity, which is evidenced by the scaphoid contour of the abdomen in these infants. Through an abdominal approach, the intestines may be

more rapidly removed from the chest and from the abdomen to give rapid relief to the respiratory problem. Then in a more leisurely manner, the diaphragmatic defect can be closed. If the abdominal cavity is not large enough to hold all of the small bowel, then the skin alone can be closed over the intestines, leaving a ventral hernia to be repaired later.

X-ray examination of the abdomen as well as the chest is indicated in any infant with acute respiratory distress. Other surgical conditions to be suspected are pneumothorax, lobar emphysema, and congenital cystic disease of the lung.

LOUIS DES. SHAFFNER, M.D.

Correspondence

FETAL HEPATITIS

To the Editor:

In 1961 Allison and Blumberg¹ hypothesized that individuals receiving serum proteins of a phenotype different from their own would produce antibodies. Subsequent experiment has proven this hypothesis.

It is obvious that when maternal isosensitization to the Rh factor occurs, a simultaneous isosensitization to fetal serum proteins is possible. Maternal isosensitization to fetal serum proteins could occur in the absence of Rh isosensitization. The mother and fetus would be of the same Rh type, but would possess serum proteins of different phenotypes. It is possible that these maternal antibodies could enter the fetal circulation and thereby damage fetal organs. This would be analogous to erythroblastosis fetalis.

There are well documented studies of fetal and neonatal hepatitis.^{2,3} It was presumed that the cause was transference of virus B from the maternal carrier to the fetus. This explanation is not plausible, as maternal antibodies should protect the fetus. Furthermore, there is no evidence that infectious hepatitis (virus A) in the mother causes liver disease in the fetus.² A more likely explanation would be hepatic damage caused by maternal antibodies resulting from fetal

serum protein isosensitization. This hypothesis would explain the absence of hepatitis in infants born of mothers who had previously given birth to infants with hepatitis. Those infants who escaped the disease would possess serum proteins of the same phenotype as the mother's. This hypothesis also has obvious implications related to the etiology of homologous serum jaundice.

The homologous serum hepatitis agent (virus B) must, of necessity, selectively reside only in certain serum proteins. Some serum protein fractions from known "infective plasma" do not produce hepatitis. The incubation period of "virus B" hepatitis is unusually prolonged. The virus, to date, has not been grown on culture. It can only be transmitted parenterally. Furthermore, if virus B is really present at some time, the first carrier must have been infected from a non-parenteral source. What has happened to this reservoir? The hypothesis of protein isosensitization would explain these discrepancies.

MARTEL J. DAILEY, M.D.
Williamston, N. C. 27892

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PRESIDENT'S PAGE

Building for the Future of Health Care in North Carolina

Remarks on the occasion of the Ground-Breaking Ceremony for the Society's New Headquarters Building, Lane and Person Streets, Raleigh, N. C., December 11, 1969

On behalf of the Society, I want to express our appreciation to all of you for joining us on this cold, damp morning to wish us well in this venture. Our ceremony will be brief, but before proceeding to the business of turning the first spadeful of earth, I want to share with you a few thoughts about the Medical Society, and our reasons for embarking on this building project.

The Society was organized in 1799, and our first building committee was appointed in 1885. Thus, it is apparent that we have given this matter some thought, and we can hardly be charged with precipitous action. At the present there are about 5,000 physicians licensed to practice medicine in North Carolina. Allowing for those licensed here but living elsewhere, and those retired or disabled, it is calculated that the state has about 4,300 physicians in active practice. Of these, some 3,900 are members of the State Medical Society. We are, therefore, the voice of the medical profession in the state.

Until 1947 the business of the Society was conducted by physicians who were members and elected officers of the Society. At that time it became apparent that the affairs of the Society were of sufficient magnitude to transcend volunteer effort, and Mr. James T. Barnes was employed as our first full-time staff executive, and I am pleased to report that he is still with us, currently as our executive vice-president. Our staff has grown to some 14 full-time employees. With the increasing complexity of our operation, not only have we found it necessary to add to our staff, but for several years it has become acutely apparent that our leased office space, occupying the second floor of the Capitol Club building, was inadequate for our needs both from the standpoint of space and physical arrangement. Our current

building committee, under the able chairmanship of Dr. Hewitt Rose of Raleigh, began to intensify their efforts. These efforts have involved a great deal of work in planning, land acquisition, working with our development consultant, Mr. Ford Worthy; our architect, Mr. Milton Small and his associates; our general contractor, Mr. Mims and his associates; our attorney, Mr. John B. Anderson, Jr.; loan arrangements with our banking associates; and finally, the committee has listened most patiently to the ideas of some 3,900 doctors who had about 3,900 ideas as to where and how the building ought to be built, and how it ought to be financed. The committee has truly performed a magnificent job.

The building will consist of two floors of office space plus a ground level parking area. The Medical Society, for the present, will occupy the first floor of 16,000 square feet, and the second floor of the same size will be leased to health related organizations. The building is being erected on a sub-structure designed to accommodate two additional stories, whenever the need for future additional space may be required.

We are building our headquarters in Raleigh, not only because it is a pleasant, growing city, and not only because we like the neighborhood, but because the affairs of the Society are so intimately bound to various functions of state government. The Medical Society itself was created by a charter from the Legislature, and some 20-odd state statutes set forth, in the law, areas of responsibility in health affairs for the Medical Society. Our officers and staff are in virtual daily contact with state agencies, including the State Board of Health, Medical Care Commission, Department of Mental Health, State Board of Medical Examiners, State Board of Nursing, Department of Social

Services, State Blind Commission, Department of Motor Vehicles, State Board of Education, State Board of Higher Education, Governor's Council on Aging, and others.

Someone has also pointed out that we will be in rather close proximity to the State Legislative Building and the Governor's Mansion. It is certainly true that we have a deep interest in the legislative process, especially as it relates to health care. Our legislative program has been a positive one, largely unsung. The record shows that, year after year, the Medical Society favors many more health bills than it opposes. Most of the time, even when our representatives testify before legislative committees on matters of health legislation, there is a notable lack of publicity. To mention only a few instances, in the 1969 General Assembly we testified in favor of highway safety legislation, including the implied consent law; in favor of increasing state support to our schools of nursing; in favor of appropriations for the needed capital improvements at the University of North Carolina School of Medicine at Chapel Hill; in favor of the establishment of a department of family practice at the same school; in favor of some state subsidy for the recruitment of needy young North Carolinians into the Duke and Bowman Gray schools of medicine; in favor of an occupational health law to strengthen the hand of the State Board of Health in improving the environment of the workshop; in favor of measures designed to prevent the contamination of our environment; and many, many others. It is increas-

ingly apparent that the government is interested in health, and I assure you that we in medicine are equally interested in government.

Then, too, we have a multitude of other activities and interests: The Society helps its members practice medicine more effectively by making available many resources, including scientific meetings, symposia, speakers, library materials, and medical films. It publishes a scientific journal every month. It has legal services and a placement bureau which are available to all its members. It has a field service program to extend the services of the headquarters to county medical societies and individual physicians.

In closing, I should like to read to you article II of our constitution, entitled "Purposes of the Society:"

"The purposes of this Society shall be to federate and bring into one compact organization the medical profession of the State of North Carolina, and to unite with similar organizations in other states to form the American Medical Association with a view to the extension of medical knowledge, and the advancement of medical science; to elevate the standards of medical education and medical service, and to promote friendly intercourse among physicians and to enlighten and inform the people with regard to the great problems of medical care and public health, so that the profession shall become more capable and honorable within itself, and more useful in the prevention and cure of disease, and in prolonging and adding comfort to life."

It is with this purpose and in this spirit that we gather here to break ground for this building.

EDGAR T. BEDDINGFIELD, JR., M.D.

Despite the chilly weather, a considerable number witnessed the Groundbreaking Ceremony for the new Headquarters Building of the State Medical Society in Raleigh on Dec. 11, 1969. In addition to President Beddingfield, those present for the occasion included members of the Society and headquarters staff; William N. Hilliard, Executive Director; James T. Barnes, Vice President; the Building Committee and its chairman, Dr. Hewitt Rose; Mrs. Peggy Crutchfield, President of the Women's Auxiliary; Mrs. Mary Edith Rogers, President of the North Carolina Nurses Association; Milton Small, architect; and Carl Mims, general contractor; and representatives of other professional groups.

Mr. James Reid, former mayor of Raleigh, spoke in behalf of the Capital City, and Mrs. Scott, wife of Governor Bob Scott, spoke in behalf of the State government.

Bulletin Board

COMING MEETINGS

Watts Hospital, Medical and Surgical Symposium—
Durham Hotel, Durham, Feb. 20-21.

Symposium on Development and Learning Disorders in the Pre-school Child, sponsored by the Division for Disorders of Development and Learning, Biological Sciences Center of the Child Development Institute, University of North Carolina—Chapel Hill, Feb. 20-21.

Medical College of Virginia, Twenty-third Annual Stoneburger Lecture Series, on Hematology—Richmond, Feb. 19-20.

Greensboro Academy of Medicine, 23rd Annual Symposium—Greensboro, March 6.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Dr. Stephen H. Richardson, associate professor of microbiology, returned recently from Pakistan where he studied cholera in an epidemic area.

Dr. Richardson, one of only about 30 U. S. scientists who are actively conducting research on cholera, spent nine days in Dacca, East Pakistan, as a consultant to the Pakistan-SEATO Cholera Research Laboratory.

The Dacca area is being considered as the site for a field trial of a new type of cholera vaccine. Dr. Richardson's research over the past five years on the organism (vibrio) that causes cholera was significant in the development of the new vaccine.

During his trip Dr. Richardson conferred with scientists in England, Thailand, and Japan.

* * *

Dr. Richard T. Myers, professor and chairman of the Department of Surgery, and Dr. Timothy C. Pennell, assistant professor of surgery, recently were awarded the Silver Medallion by the American College of Surgeons and Ethicon, Inc.

They received the award for a surgical motion picture, "Right Hepatic Lobectomy," which was produced by the medical school's Department of Audio-Visual Resources. The film was presented during the Motion Picture Symposium on Spectacular Problems in Surgery at the annual clinical congress of the American College of Surgeons.

Movies are selected for the symposium on the basis of "excellence of cinematic production and the complexity of the clinical situations that are depicted."

* * *

Dr. Norman M. Sulkin, professor and chairman of the Department of Anatomy, has been elected president-elect of the Southern Association of Anatomists. He will be installed as president next November and will succeed Dr. Melvin H. Kniseley, professor and chairman of the Department of Anatomy at the Medical College of South Carolina.

The Southern Association of Anatomists was estab-

lished eight years ago. It now has a membership of approximately 250 anatomists from medical schools in the southeastern states. The organization will meet in Winston-Salem in 1971.

* * *

Two members of the Bowman Gray faculty have been elected to key positions in the American Heart Association. Dr. A. Robert Cordell, associate professor of surgery, was elected vice president-elect for the Mid-Atlantic Region and Dr. C. Glenn Sawyer, professor of medicine, was elected as North Carolina's representative on the association's Board of Directors.

Both Dr. Cordell and Dr. Sawyer are past presidents of the North Carolina Heart Association.

The election took place at the 42nd annual meeting of the American Heart Association in Dallas, Texas. Others from the Bowman Gray School of Medicine who participated in the meeting were Dr. Henry S. Miller Jr., associate professor of medicine and president of the North Carolina Heart Association; Dr. Robert N. Headley, associate professor of medicine; Dr. B. Lionell Truscott, professor of neurology and coordinator of the Comprehensive Stroke Program of the North Carolina Regional Medical Program; Dr. Michael A. Stein, resident in surgery; Dr. Thomas B. Clarkson Jr., professor and director of the Department of Laboratory Animal Medicine; and Dr. Harold D. Green, professor and chairman of the Department of Physiology.

* * *

Dr. Frank R. Johnston, professor of surgery, was elected vice president of the North Carolina Surgical Association at the organization's annual meeting in Mid-Pines. The association, which was established 20 years ago, has 85 members.

* * *

Dr. Claude A. McNeill, Jr. of Elkin, a 1943 graduate of the Bowman Gray School of Medicine, has been elected president-elect of the Bowman Gray Medical Alumni Association.

Dr. Joseph B. Alexander of Lumberton was installed as president of the association during Alumni Weekend Nov. 14-15. He succeeded Dr. Robert P. Crouch of Asheville. Dr. Jean Bailey Brooks of Greensboro was named to a fourth term as secretary-treasurer.

Elected to seats on the association's Alumni Council were Dr. Woodrow Batten of Smithfield, Dr. J. Donald Bradsher of Roxboro, Dr. William C. Hayes of Wilkesboro, Dr. Emmett S. Lupton of Greensboro, and Dr. Robert C. Pope of Wilson.

* * *

Dr. Hugh B. Lofland Jr., professor of pathology, has been elected to the executive committee of the Council of Arteriosclerosis of the American Heart Association.

* * *

Dr. Donald M. Hayes, associate professor of medicine, recently was reelected to the Board of Directors of the North Carolina Division of the American Cancer Society.

* * *

Dr. James F. Martin, professor of radiology, was

reelected secretary-treasurer of the North Carolina Chapter, American College of Radiology, at a meeting of the chapter in Southern Pines.

* * *

Dr. Francis M. James, III, assistant professor of anesthesiology, presented a paper at the national meeting of the American Society of Anesthesiology, held recently in San Francisco. He spoke on "An Evaluation of Vasopressor Therapy for Maternal Hypotension during Anesthesia."

* * *

Eighty physicians, clinical chemists and medical technologists attended a workshop seminar on "Blood Lipids—Analysis and Abnormalities" Dec. 5 and 6 in Winston-Salem.

Dr. Hugh B. Lofland Jr., professor of pathology, was director of the workshop which was sponsored by the North Carolina Society of Pathologists. The program was designed to familiarize North Carolina hospital laboratory workers with the new techniques available for blood-lipid analysis and their significance in medical diagnosis.

Dr. Lofland and Dr. Robert W. Prichard, professor of pathology, participated on the faculty for the workshop.

* * *

Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry, was a visiting lecturer recently at the Medical College of South Carolina.

Dr. George S. Malindzak Jr., associate professor of physiology, spoke recently at the George C. Marshall Space Flight Center in Huntsville, Ala. The topic of his talk was "Biomedical Research and NASA Technology."

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Dr. William P. Richardson, professor of preventive medicine at the University of North Carolina School of Medicine, has been elected president-elect of the American College of Preventive Medicine.

Dr. Richardson will assume office in the fall of 1970.

* * *

Dr. Morris Schaefer of the University of North Carolina faculty has been appointed by the World Health Organization to a five-year term on the Expert Advisory Panel of Public Health Administration.

Recommendations from the committee will go to the World Health Organization as potential advice to governments desiring information on public health administration.

* * *

The North Carolina Department of Mental Health has awarded a \$12,000 grant to the Plan of Pharmacy Assistance program at UNC's School of Pharmacy to evaluate a clinically-oriented, unit-dose drug distribution system at Western Carolina Center in Morganton.

The basic concept of unit-dose dispensing is that the pharmacist issues each patient's needed drug in identified, individual doses to the patient care area at the time the drugs are needed.

The director of the program is Don C. McCloud, who is also assistant director of the Plan of Pharmacy Assistance.

* * *

Two members of the University of North Carolina's Medical School's Department of Surgery attended the meeting of the Association for Academic Surgery in Boston, Nov. 19-22.

Dr. Robert D. Croom III, chief resident in surgery, presented a paper entitled, "Power Dissipation and Other Pulsatile Hemodynamic Changes Following Right Pulmonary Artery Occlusion in Dogs."

Dr. Benson R. Wilcox, chief of the Division of Thoracic Surgery and co-author of the paper, also attended the meeting.

* * *

Two separate agencies are supporting a project to develop regional continuing education programs for practicing physical therapists in North Carolina.

The North Carolina Regional Medical Program will support the plan with a \$25,543 grant and the Duke Endowment with a \$10,000 grant to the North Carolina Hospital Education and Research Foundation, Inc.

The project is being coordinated by Prof. Marjory Johnson of the University of North Carolina School of Medicine's Division of Physical Therapy.

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ASHEVILLE, North Carolina

Commander Ronald L. Shearin, son Dr. and Mrs. Paul E. Shearin, of Chapel Hill, a radiological health specialist, was a member of the launch team at Cape Kennedy for the Apollo 12 moon shot.

Commander Shearin, a 1955 physics graduate of the University of North Carolina at Chapel Hill, is liaison officer between NASA and the Department of Public Health.

* * *

Dr. Joseph Patterson, a professor of anesthesiology at the University of North Carolina School of Medicine is doing what he can to help children maimed and disfigured in Vietnam. He is working at the Children's Medical Relief International (CMRI) plastic and Reconstructive Surgery Center in Saigon.

During his three-month stay, Dr. Patterson is serving as an anesthesiologist for the surgical teams and as a teacher of Vietnamese medical students.

* * *

The dean of the University of North Carolina School of Dentistry told those attending the American Public Health Association meeting in Philadelphia last month that dental care must be included in regional medical programs.

Dr. James W. Bawden said, "True comprehensive care for heart disease, cancer and stroke patients is not possible unless dental care is included as an integral part of the program."

The UNC dean spoke from two years experience since the North Carolina Regional Medical Program dental project was the first to be funded in the United States and is the pioneer in the field.

Dean Bawden underscored the importance of a close working relationship between dentists and physicians in developing a program such as the one North Carolina now has. And he suggested an increase in the number of hospital staff appointments for dentists to improve the level of dental care for the hospitalized patient.

* * *

That new-born baby in the hospital nursery may not be getting the kind of care you think he is unless your hospital has the latest facts on germ control.

Dr. Edward A. Mortimer, a University of New Mexico pediatrician speaking here in November, said, "Lots of the stuff we do in new-born nurseries is pure mythology."

"Hospital nurseries would do well to throw away the caps and masks worn by nurses" he said. Instead they ought to spend a great deal more time carefully washing their hands."

Dr. Mortimer is professor and chairman of the department of pediatrics at the University of New Mexico. He spoke on the University of North Carolina campus to more than 100 physicians from across the state and the southeast who were gathered for the 13th annual School of Medicine Symposium which spotlighted infectious diseases in children.

Dr. Mortimer and his associates have conducted studies which have shown that a 10-second scrubbing of the hands with common bar soap and warm water can

do more to keep a baby sterile during the first few days of life than any other practice yet discovered.

* * *

One leave of absence and 12 resignations are among faculty changes approved for the University of North Carolina here by the University's Board of Trustees.

Gerald W. Fernald, assistant professor of medicine, is on one year's leave to do research at Duke University.

Five medical professors are resigning this year. David Ausmus Davis resigned to become clinical professor of surgery here. Robert B. Duke, associate professor of medicine, resigned to accept a position at North Carolina State University.

Associate Professor of Medicine James Edward Etheridge, Jr. resigned for health reasons. George F. Hamilton, assistant professor of medicine, resigned to accept a position at East Carolina University. Albert R. Krall, associate professor of medicine, resigned to accept a position at the Medical College of South Carolina.

In addition, Jay Howard Glasser, assistant professor in the School of Public Health, has resigned to accept a position at the School of Public Health, University of Texas, Houston, Tex.

Dr. Meldrum B. Winstead, a Ph.D. graduate of the Chemistry Department at UNC, has been awarded the first Georg von Hevesy prize in nuclear medicine. He is professor of chemistry at Bucknell University.

The prize was awarded by the European Society for Nuclear Medicine in Zurich, Switzerland, and is an international award.

* * *

Two members of the University of North Carolina School of Medicine's Department of Surgery presented papers at the meeting of the Southern Thoracic Society held recently in Washington, D. C.

Dr. Benson R. Wilcox, chief of the Division of Thoracic Surgery, spoke on "Changes in Pulmonary Vascular Dynamics Following Closure of Atrial Septal Defects in the Human."

Dr. Winfred L. Sugg, associate professor of thoracic surgery, presented a paper entitled "Cardiac Assistance (Counterpulsation) in Ten Patients: Clinical and Hemodynamic Observations."

* * *

Six representatives of the University of North Carolina participated in the 97th annual meeting of the American Public Health Association held in Philadelphia in November.

Five of the six are with the UNC School of Public Health.

They are Dr. John T. Gentry, assistant dean for program development, Dr. Arnold D. Kaluzny, Dr. Mindel Sheps, Dr. Morris Schaefer, chairman of the Department of Public Health Administration, and Charles Harper, assistant dean for finance and administration.

Dean James W. Bawden of the UNC School of Dentistry also attended the program and spoke in the "Support for Dentistry" section on "Dentistry's Role in Regional Medical Programs."

The Division of Physical Therapy at the University of North Carolina here has been awarded a grant of \$17,428 from the Rehabilitation Services Administration of the Social and Rehabilitation Service, Department of Health, Education and Welfare.

A major portion of this grant will support the third year of a project to evaluate and revise the Physical Therapy curriculum at the University.

Prof. Charlene Nelson of the UNC faculty is director of the study, and Mrs. Margot T. Danker, University of Southern California, serves as consultant.

This study is helping to clarify the changing role of the physical therapist and provide information relative to the need for graduate education programs to prepare more teachers and other qualified workers for the expanding profession.

* * *

Charles C. Johnson, Jr., the Assistant Surgeon General of the U. S. Public Health Service, spoke at the School of Public Health on "Managing Man's Environment," recently. His visit was sponsored by UNC's Institute for Environmental Health Studies.

Johnston is administrator of the Consumer Protection and Environmental Health Service, U. S. Department of Health, Education and Welfare.

Dr. Robert H. Wagner, professor of experimental pathology and biochemistry, has received the Dr. Murray Thelin Award given by the National Hemophilia Foundation.

The presentation to Dr. Wagner was made jointly by National Hemophilia Foundation President James C. Cunningham, a retired American Tobacco Co. executive, and Dr. Kenneth M. Brinkhous, chairman of the Medical Advisory Council of the Foundation and chairman of the UNC School of Medicine's Department of Pathology.

The award was presented to Dr. Wagner at a Foundation board of trustees awards dinner at the Drake Hotel in Chicago.

The award was established in memory of Dr. Murray Thelin, himself a hemophiliac, a graduate of UNC and a student of Dr. Wagner. Dr. Thelin received the Ph.D. degree in biochemistry at UNC in 1960 with Dr. Wagner as his advisor.

The award, which read, "For outstanding achievements which have contributed greatly to the health, comfort and hope of hemophiliacs" was given to Dr. Wagner for his studies in the isolation of a trace material, antihemophilic factor from blood plasma.

* * *

Chief executives from more than a score of pharmaceutical companies met here to discuss the role their industry would play in solving some of the nation's health problems.

The conference was sponsored by the University of North Carolina. Dr. C. J. Cavallito, a professor in the UNC School of Pharmacy, was conference chairman.

Dr. George P. Hager, dean of the UNC School of Pharmacy, chaired the opening session on "Some Roles of the Government as a Purchaser and Regulator."

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Duke University Medical Center's newest building was dedicated on Dec. 14 as the Marshall I. Pickens Rehabilitation Center.

Pickens has been associated with the Duke Endowment since 1928 and now serves as vice chairman of the board of trustees of that body.

The two-story structure, located on Erwin Road near Duke's School of Nursing, will serve as a center where physicians will use their skills to restore patients to gainful, meaningful places in society.

Sir Ludwig Guttmann, director of the National Spinal Injuries Centre in Aylesbury, England, delivered an address.

The building was presented by Miss Mary Switzer, Administrator of the Social and Rehabilitation service, Department of Health, Education and Welfare. Dr. Barnes Woodhall, Chancellor pro tem of Duke University, made the speech of acceptance.

Mrs. James H. Semans, a member of the board of trustees of the university, presented a portrait of Pickens, who then spoke.

Others participating in the ceremony were the Rev. James T. Cleland, James B. Duke Professor Emeritus of Preaching and dean of the chapel; Dr. William G. Anlyan, vice president for health affairs; Dr. Saul Boyarsky, director of rehabilitation; Dr. Thomas Kinney, director of medical education; and the Rev. P. Wesley Aitken, chaplain of Duke Medical Center.

The Marshall I. Pickens Rehabilitation Center is the second phase of a three-part plan to provide more comprehensive rehabilitation care at Duke Medical Center.

Phase one was the construction of a speech, hearing and surgical rehabilitation addition to Baker House, and phase three is the future construction of an inpatient facility.

* * *

Duke University Medical students and their wives have been spending several weeks raising \$5,000 to provide scholarships for students with disadvantaged backgrounds.

They did it by selling their blood.

Funds raised by the blood drive, according to statements by an organizing committee from the student government Davison Society, will support ghetto blacks, Appalachian whites, and rural Indians who expected to begin classes at the School of Medicine in 1970. Cooperating with the Davison Society in the drive was the Duke University Medical Dames, a group of medical student wives.

A grant from the Josiah Macy Foundation recently provided money to recruit such disadvantaged students, but total financial support for their studies cannot be guaranteed by the hard-pressed financial agency at Duke, according to the committee.

The students hoped to sell 250 pints of blood to raise the \$5,000. The money, added to existing scholarship funds, would aid in paying tuition and living expenses for several new students.

Dahl Gardner has been named the first Marshal I. and Sarah W. Pickens Scholar in Duke University's Graduate Program in Hospital Administration, Charles H. Frenzel, director of the program, announced recently.

The Pickens Scholarship was established in March by Mrs. Mary G. Pickens of Charlotte, whose late husband, Stanton W. Pickens, was active in Charlotte civic and cultural affairs throughout his lifetime.

In providing a \$55,000 gift for the scholarship, Mrs. Pickens explained that she wished to name it for her brother-in-law, Marshall I. Pickens, and his wife because he has, through his long association with The Duke Endowment, "given unselfishly of his time and talents to, and has been an outstanding influence for, advancement in the field of hospital administration."

Gardner, a native of Wyoming, holds a bachelor of science degree and a master's degree in business administration from Brigham Young University. He served 26 months as a second lieutenant and finance officer in the army at Fort Jackson, S. C., and presently is enrolled in his first year as a student in the Duke hospital administration program.

* * *

One full professor and four new assistant professors have been named at Duke University Medical Center.

Provost Marcus E. Hobbs of the University announced the names of four newly appointed staff members and the promotion of Miss Helen Kaiser to professor of physical therapy.

Miss Kaiser, who established the Duke physical therapy program in 1943, retired as its director last year to return to her academic position as associate professor. Since earlier this year Miss Kaiser also has been serving as consultant on physical therapy, rehabilitation service, and educational projects to the North Carolina Regional Medical Program.

Also in physical therapy, Elia E. Villaneuva was appointed assistant professor. She was previously an instructor in physical therapy and was awarded an M.A. degree in anatomy from Duke earlier this year.

Appointed assistant professor of pediatrics and neurology was Dr. John F. Griffith, a native of Canada and a graduate of the University of Saskatchewan Medical School. He has done postgraduate work at Montreal Children's Hospital, Cleveland Metropolitan General Hospital, and the Massachusetts General Hospital in Boston.

Joan Callahan Martin, a native of New York City, was named assistant professor of medical psychology in the department of psychiatry. She was a postdoctoral trainee at Duke from 1965 to 1967 and a postdoctoral fellow with the Center for the Study of Aging and Human Development from 1967 through last month.

Mrs. Martin earned her M.S. and Ph.D. degrees from Florida State University.

Newly appointed to a post as assistant professor of biochemistry is David Claude Richardson, formerly affiliated with the Laboratory of Chemical Biology at the National Institutes of Health.

Richardson is a 1962 graduate of Swarthmore Col-

lege and received his Ph.D. degree from the Massachusetts Institute of Technology in 1967.

NORTH CAROLINA STATE BOARD OF HEALTH

Gov. Robert Scott recently presented the second Medical Self-Help Humanitarian Award ever won by a North Carolinian to Walter Radcliff, Jr. of Asheville.

Radcliff won the national award for assisting in the rescue of three year old Martha Mitchell—daughter of a neighbor—from an ice covered pond. Radcliff applied mouth-to-mouth resuscitation and re-instituted breathing. He was credited by the attending physician with saving the child's life.

The award is given by the U. S. Public Health Service and Office of Civil Defense to an individual who saves a life using knowledge gained from Medical Self-Help training. Radcliff completed the course at the Veterans Administration Hospital at Oteen, N. C. in 1964.

OAK RIDGE ASSOCIATED UNIVERSITIES

The Special Training Division of Oak Ridge Associated Universities will offer three 1970 courses in Oak Ridge, Tennessee, on medical and research applications of radioisotopes, according to the following schedule:

Medical Radioisotopes—Feb. 2-27; May 4-29

Nuclear Medical Technology—Feb. 2-27; May 4-29

Radioisotopes in Research—June 8—July 3

The four-week courses, conducted by the Division for the U. S. Atomic Energy Commission, are designed to meet the needs of physicians, nuclear medical technicians, and scientific, engineering, and technical personnel for instruction in the safe and efficient use of radioisotopes within their respective fields.

Additional information and applications for these and other courses offered by the Division (including neutron activation analysis, liquid scintillation counting, health physics, and other special courses) may be obtained by writing: Special Training Division, Oak Ridge Associated Universities, P. O. Box 117, Oak Ridge, Tenn. 37830.

SOUTHERN MEDICAL ASSOCIATION

Dr. J. Leonard Goldner, M.D., professor and chairman of the Division of Orthopedic Surgery at Duke University, was installed as president of the Southern Medical Association at its recent annual meeting held in Atlanta, Georgia. He will serve as president until November, 1970.

Dr. Goldner received his premedical education from the University of Minnesota, and his M.D. degree from the University of Nebraska College of Medicine. After his internship at the University Hospital, Nebraska College of Medicine, he served as assistant resident in the Division of Orthopedic Surgery at Duke University Medical Center. As resident and research fellow at Georgia Warm Springs Foundation, 1947 to 1949, Dr.

Goldner collaborated in a special study in reconstructive surgery of poliomyelitis and scoliosis, returning to Duke University as Chief Resident in Orthopedic Surgery in 1949-1950. He was selected, in 1955, as one of five doctors from the United States and Canada to tour Great Britain and France as Exchange Orthopaedic Fellow, American Orthopaedic Association.

Among the appointments which Dr. Goldner has fulfilled at Duke University Medical Center are Assistant Professor of Orthopedic Surgery, 1951, Associate Professor, 1954, Professor, 1957, and Professor and Chairman of the Division, 1967.

The duties of numerous committee activities and consultant appointments which Dr. Goldner performs, well reveals that he is a person of few idle moments. His service to medical organizations includes active membership in a wide range of state and national societies.

The high regard of his colleagues was demonstrated when he was given the Governor's Award as Physician of the Year for the State of North Carolina, in 1967.

His additional activities in medicolegal affairs, his outstanding exhibits in his specialty field, and his support of community and civic affairs further serve to identify his enthusiastic dedication and vast capabilities.

AMERICAN MEDICAL ASSOCIATION

In this day of unprecedented opportunities and media for communication, but with seemingly less cooperation and understanding, the American Medical Association last autumn undertook a major step to promote a greater awareness of the services performed by the medical profession.

Through this innovative program, selected members of the AMA Communications Division staff have been assigned as "account executives" to assist the various AMA councils, committees, state and county medical societies, AMA internal divisions, and the Institute for Biomedical Research in the areas of public relations and communications.

Each "account executive" will have two major functions: (1) to provide liaison between his council or committee, i.e., "account," and the Communications Division; and (2) to advise the Communications Division of opportunities for positive-action public relations activities based on what his council or committee is doing, what public relations problems it may have encountered, and to summon professional PR help from the Division to assist in resolving them. The account executive will also volunteer the Division's professional services to help offset any potential or anticipated problems which could conceivably result in a "bad press" for the profession.

THE COMMONWEALTH FUND

The Commonwealth Fund recently announced three grants totaling \$640,000 for programs bearing upon the medical problems of human sexuality and upon family planning and population control.

—\$240,000 to the University of Pennsylvania's Center for the Study of Sex Education in Medicine, which was founded at the School of Medicine last year with Fund support.

—\$300,000 to Planned Parenthood—World Population, for its new Center for Family Planning Program Development, which has been organized to assist communities and various governmental agencies to bring family planning services to this country's entire population of low-income women of childbearing age by the early 1970s.

—\$100,000 to the Biomedical Fellowship Program of the Population Council, a private agency whose programs of research, demonstrations, and technical assistance—as well as education—have made it a leading international resource for governments and institutions seeking to meet the world population crisis.

E. V. ALLEN MEMORIAL SCHOLARSHIPS

Applications are now being accepted for the E. V. Allen Memorial Scholarships, open to junior and senior medical students attending medical schools in the United States or Canada. The scholarship provides three months of cardiovascular study at the Mayo Clinic, Rochester, as well as \$1,000 award.

Deadline for applications is April 1, 1970. Applicants will be notified by May 1, 1970.

Brochures may be obtained by writing to Minnesota Heart Association, 4701 West 77th Street, Edina, Minn. 55435.

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community understand health issues such as drug abuse. And alcoholism. And heart disease. Health careers. And others.

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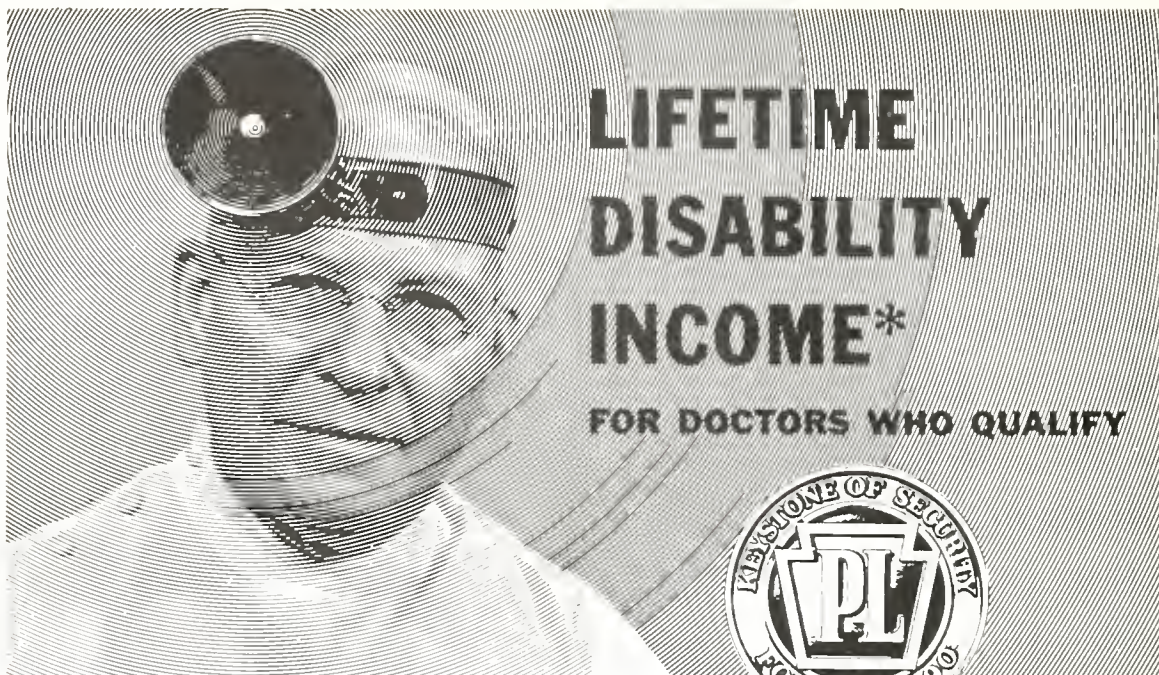
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EXCEPTIONS. Benefits are not payable for loss beginning while this policy is not in force, resulting from non commercial air travel, suicide or any attempt thereof, mental illness, loss beginning on or after the renewal date following your sixty-fifth birthday or retirement, whichever is first, except as otherwise provided, loss due to war or while in armed service; loss resulting from insured's intoxication or narcotics addiction, or extended world travel without company consent.

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Each tablet contains ethynodiol diacetate 1 mg., mestronol 0.1 mg.



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to adjust to motherhood,
to give her new baby all the love
and attention he requires.
She needs time for her husband . . .
and for herself as well . . .
so that she can come to terms
with the increased cares
and responsibilities now facing her.
She needs time to decide
when she will have additional children
and how many she will have.

OVULEN-21[®]

Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

GIVES HER TIME

Your prescription for Ovulen-21 gives the new mother time to meet her family's present needs...to plan for her family's future.

She can take Ovulen-21 confidently and comfortably month after month. Its dependability is enhanced by its simplicity of use. A woman needs little or no time to learn the simple Ovulen-21 regimen: three weeks on—one week off. And the automatic record-keeping of the petite, virtually "patient-proof" Ovulen-21 Compack[®] helps to maintain her schedule...helps put time on her side.

Immediately post partum is the time

It is the time when motivation is highest—when a new mother needs expert advice for the future, so she can space her children and limit her family.

It is also the most opportune time, since she is conveniently present in the hospital, for her to be given both instructions and a prescription.

Non-nursing mothers may begin Ovulen-21 immediately after delivery, on the day of departure from the hospital or at the first postpartum visit, as desired. It is recommended that nursing mothers begin Ovulen-21 four weeks after delivery.

A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968^{1,2} estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contra-

ceptives has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching. The following laboratory results may be altered by oral contraceptives: hepatic function; increased sulfabromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T³ uptake values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1965. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1965.

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Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.

Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.

Dosage: 1 Extentab morning and evening.

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A-H ROBINS

The Month in Washington

A Senate subcommittee said that the number of medical malpractice suits probably will increase and "the situation threatens to become a national crisis."

Sen. Abraham Ribicoff (D., La.), chairman of the Subcommittee on Executive Reorganization which has been reviewing the federal role in the nation's health care problems for nearly two years, reported eight conclusions after an extensive staff study. They are:

"1. The number of malpractice suits and claims is rising sharply in certain regions of the country. The size of judgments and settlements is increasing rapidly.

"2. Most malpractice suits are the direct result of injuries suffered by patients during medical treatment or surgery. The majority have proved justifiable. These suits are the indirect result of a deterioration of the traditional physician-patient relationship.

"3. The publicity given to higher malpractice judgments and settlements, based frequently on new legal precedents, is likely to trigger increasing litigation in other States. The situation threatens to become a national crisis.

"4. Already, higher judgments and settlements are having the following direct results: (a) Companies providing malpractice insurance are increasing the cost of coverage; (b) These costs—in the form of higher charges—are being passed on to patients, their health care insurance companies, and federal health care programs.

"5. The rising number of malpractice suits is forcing physicians to practice what they call defensive medicine, viewing each patient as a potential malpractice claimant. Physicians often order excessive diagnostic procedures for patients, thereby increasing the cost of care. Moreover, they are declining to perform other procedures, which in themselves, may entail some risk of patient injury.

"6. At present, it appears that no one affected by the rise in malpractice suits and claims has been able to deal with this prob-

lem in a manner that promises to alleviate this situation.

"7. The lion's share of the total cost to the insurance companies of malpractice suits and claims goes to the legal community.

"8. There is a definite federal role in the malpractice problem."

Specialists listed as having "a greater potential exposure to malpractice suits" were orthopedic surgeons, general surgeons, neurosurgeons, anesthesiologists, obstetricians, and gynecologists.

* * *

A special task force recommended that the federal government experiment in different ways of paying physicians under Medicare and Medicaid.

In the first of a series of reports on Medicaid, the task force—appointed by Health, Education, and Welfare Secretary Robert H. Finch last July—said:

"HEW should actively program experiments for incentive reimbursement under Medicare and Medicaid, with new emphasis on experiments in payment methods for physicians as the key generators of health services. In addition to experiments in institutional reimbursement, other experiments could emphasize compensation to groups of practitioners using modified approaches to capitation with built-in controls on quality and costs."

The report said that states also should be made aware of options now available under present laws and regulations in addition to the individual fee-for-service basis for payments to physicians. The report listed "contract payments with quality controls, case average methods, and fee for time."

The task force recommended that Medicaid funds be used to finance group practice, neighborhood health clinics, and home health care programs, particularly in ghettos and other low-income areas.

The recommendation was the core of a goal "to effect changes and improvements in the health care delivery system" of the nation.

The federal government was urged to take a more positive leadership role in the Medicare program by first improving its

own administrative machinery and then getting the states to make their management functions more efficient.

The American Medical Association urged Congress to give top priority to appropriations that will help increase the number of physicians.

Testifying before a Senate appropriations subcommittee, Dr. C. H. William Ruhe, director of the AMA's Division of Medical Education, said that "medical education should be supported financially as fully as possible to meet the pressing need which exists today for an increased number of physicians."

"We believe," he said, "that in any appropriation priorities established for all government programs, those which affect health care should be given primary consideration. Further, because of the special need . . . for more physicians, we urge that appropriations relevant to the production of physicians be given first priority."

Concerning decreases in the Administration budget in support of research and training grants, fellowships, library grants and research facility construction, the AMA spokesman said:

"It is difficult to estimate the effect these reductions will have upon efforts to increase physician production, but there is concern among many medical educators that the growth in medical school enrollments will be inhibited. We believe that this effect should be watched closely and corrective measures instituted promptly if physician production is impaired."

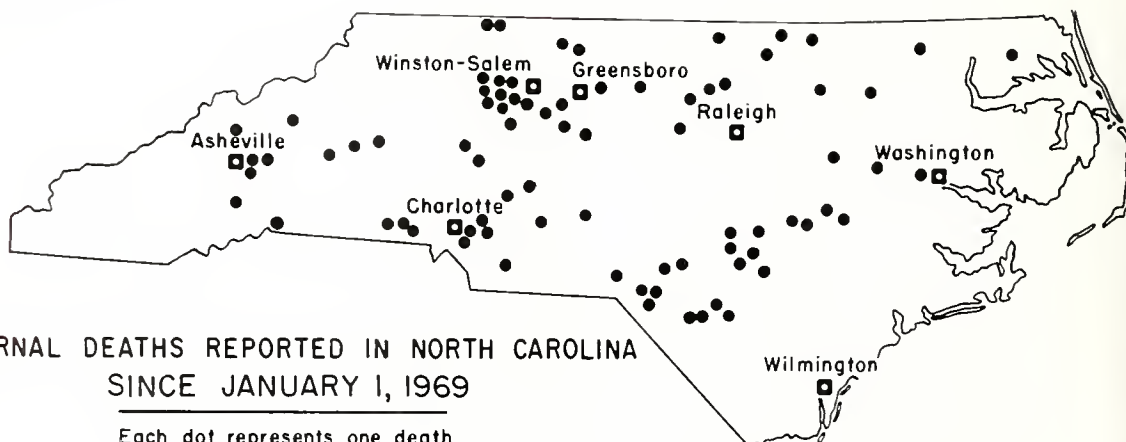
The AMA joined the Student American Medical Association and the Association of American Medical Colleges in a joint statement which said that "an increase in the appropriation for the Health Professions Student Loan Program is crucial."

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PUBLIC HEALTH—The Virginia State Health Department has positions for energetic physicians who, as state employees, are assigned to direct public health and medical care programs in local health districts. Programs include traditional public health services plus activities under medicare and medicaid. In-service training and opportunity for post-graduate study provided. Liberal fringe benefits. Qualifications—American citizen or declaration, license to practice medicine in Virginia at time of employment, age under 55 (under 60 if M.P.H.), and two years' experience in civilian or military practice. Salary \$17,900 with regular increments to \$21,400 in 3½ years. \$19,600 to \$24,500 in 4½ years with M.P.H. in districts over 100,000 population. Inquire director, local health services, Virginia State Department of Health, Richmond, Virginia 23219.

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To guard susceptible patients against intestinal monilial overgrowth during broad-spectrum therapy—the protection of nystatin is combined with demethylchlortetracycline in DECLOSTATIN.

For your susceptible candidates, prescribe DECLOSTATIN—the broad-spectrum therapy that prevents monilial overgrowth.

Effectiveness: Because its antibacterial component is DECELOMYCIN (demethylchlortetracycline), DECLOSTATIN should be equally or more effective therapeutically than other tetracyclines in infections caused by tetracycline-sensitive organisms. The antifungal component, Nystatin, protects against superinfection by antibiotic-resistant fungal overgrowth (particularly monilia) in the intestinal tract.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, phototoxic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—*anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani.* Skin—*maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported.* Photosensitivity; *onycholysis and discoloration of the nails (rare).* Kidney—*rise in BUN, apparently dose related.* Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—*urticaria, angioneurotic edema, anaphylaxis.* Teeth—*dental staining (yellow-brown) in children of mothers given the drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood.* Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in animal bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, food and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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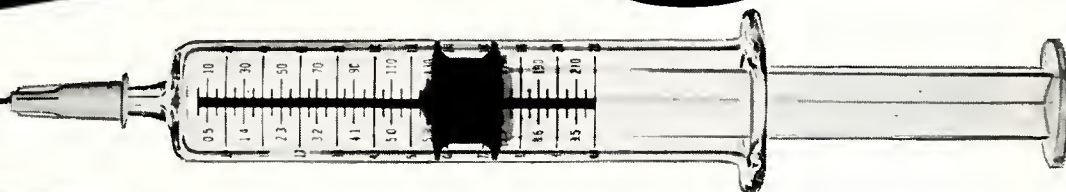
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before your "minor" becomes a major problem

choice initial treatment for urinary infections

Cybis® (nalidixic acid) provides prompt broad gram-negative bactericidal activity at normal urinary pH range that can eradicate troublesome *E. coli*, *Aerobacter* and *Proteus*. A good starting drug, it can effectively accelerate management of infection due to sensitive organisms.

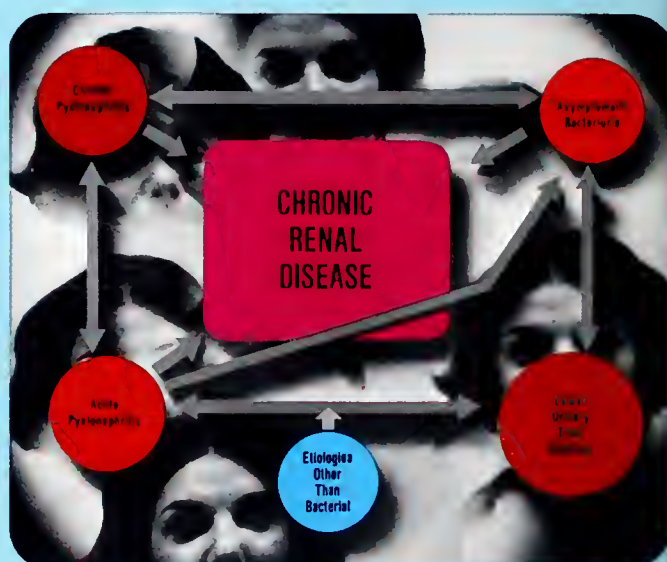
essential control within the primary 72-hour cycle

In cases of acute infection due to susceptible organisms, Cybis works well toward the rapid clearing of disease when obstruction is absent or can be relieved. Within 48 to 72 hours, symptoms are frequently eased and bacteriuria eliminated. Susceptible infection is often eradicated in 10 to 14 days.

blocks the young female progression of infection

Cybis can be useful in naturally susceptible young female patients with new or well-established urinary disturbances. Combining rapid potency with relative freedom of serious side reactions and toxicity, the drug can be of particular value in preventing higher tract involvement or blocking the possible continuum of disease. (See Chart)

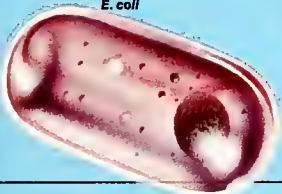
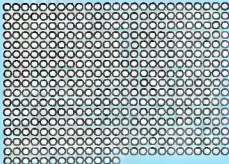
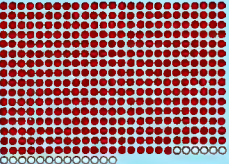



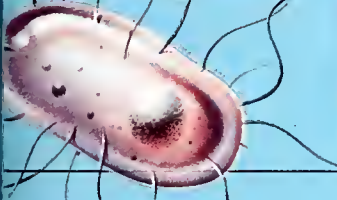


Kinetic Relationship of Acute and Chronic Bacterial Pyelonephritis to Chronic Renal Disease²



consistent activity against 706 gram-negative strains

In vitro testing of *E. coli*, *Aerobacter*
and *Proteus* species showed better
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(See Table)

Better Than 90% Sensitivity Among 3 Common Urinary Invaders

	Strains	Sensitivity to Nalidixic Acid	Sensitivity
 <i>E. coli</i>	 413	 394	95%
 <i>Aerobacter</i>	 148	 133	90%
 <i>Proteus</i>	 145	 129	89%
TOTAL 706 57 of 86 <i>Pseudomonas</i> species were resistant		Average	91%

Cybis[®]
(nalidixic acid)

for the strong start and a fast finish... in cystitis, pyelonephritis, prostatitis, urethritis

References: 1. Reimann-Hunziker, R. and Reimann-Hunziker, G. J.: *Praxis* 53:15, Jan. 9, 1964. 2. Sanford, J. P.: *Med. Times* 96:715, July 1968. 3. Reese, L.: *Canad. M. A. J.* 92:394-397, Feb. 20, 1965.

Before prescribing, please consult complete product information, a summary of which follows on the next page, including indications, warning, precautions, adverse reactions and dosage.

Summary of prescribing information

Indications: Urinary tract infections in which species of sensitive gram-negative bacteria are predominant, particularly *Proteus*, *Escherichia coli*, *Aerobacter*, *Klebsiella*, and certain strains of *Pseudomonas*. Gram-positive bacteria are less sensitive to Cybis but favorable clinical results have been observed.

Warning: Use in Pregnancy. This drug is not recommended in the first trimester of pregnancy. However, it has been used in several patients during the last two trimesters without producing apparent ill effects in either mother or fetus.

Precautions: Although prolonged treatment with Cybis has been generally well tolerated, as with all new drugs it is advisable to carry out blood, renal, and liver function tests periodically if treatment is continued for more than one or two weeks. The dosage recommended for adults and children should not be arbitrarily doubled unless under the careful supervision of a physician. **It should be used with caution in patients with liver disease, epilepsy, or severe cerebral arteriosclerosis, and in patients in whom kidney function is severely impaired.** Patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving Cybis and, if a photosensitivity reaction occurs, therapy should be discontinued.

During treatment microorganisms may develop resistance to this drug. Resistant bacteria, not previously present or identified, may emerge. Cultures should be taken and bacterial sensitivity tests made periodically, particularly if the clinical response is unsatisfactory or if a relapse occurs. Should resistance develop, other specific chemotherapy should be instituted; no cross resistance has been observed. If new strains of bacteria that are not sensitive emerge, other effective antibacterial agents may be added. When Benedict's or Fehling's solutions or Clinitest® Reagent Tablets are used to test the urine of patients taking Cybis, a false-positive reaction for glucose may be obtained due to the liberation of glucuronic acid from the metabolites excreted. However, a colorimetric test for glucose based on an enzyme reaction (using, for example, Clinistix® Reagent Strips or Tes-Tape®) does not give a false-positive reaction to Cybis glucuronide.

Adverse reactions: Mainly mild nausea, vomiting, and other gastrointestinal disturbances; less frequently, sleepiness, drowsiness, weakness, headache, dizziness and vertigo, and rarely cholestasis, paresthesia, thrombocytopenia, leukopenia, or hemolytic anemia which in some patients may have been associated with deficiency in activity of glucose-6-phosphate dehydrogenase. Itching, pruritus, rash, urticaria, mild eosinophilia, reversible photosensitivity reactions primarily involving exposed surfaces, and reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), occurred occasionally. Reversible increased intracranial pressure with bulging anterior fontanel, papilledema, and headache have been observed occasionally in infants and children. Toxic psychosis and brief convulsions (the

latter generally in patients with possible predisposing factors, and both usually associated with excessive dosage) have been recorded in rare instances.

Dosage and administration: Adults—Four Gm. d by mouth (2 tablets of 500 mg. four times daily) for **c** to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. d (1 tablet of 500 mg. four times daily). **Children—** According to age and weight: approximately 25 mg per pound of body weight per day, administered in divided doses.

Note: The dosage recommended above for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Until further experience is gained, infants under 1 month should be treated with the drug.

How supplied: Tablets of 500 mg., bottles of 50.

Before prescribing, please refer to complete prescribing information.

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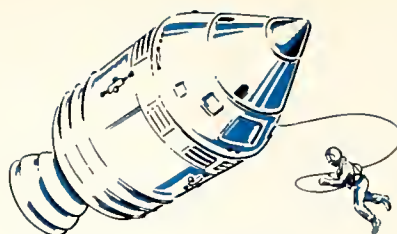
Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.





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dryness of the mouth, nausea, ner-
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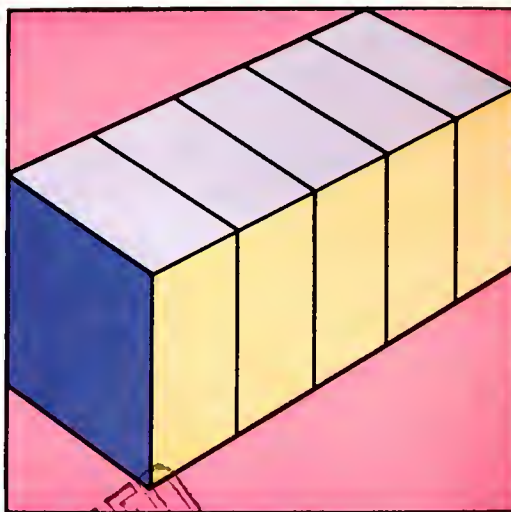
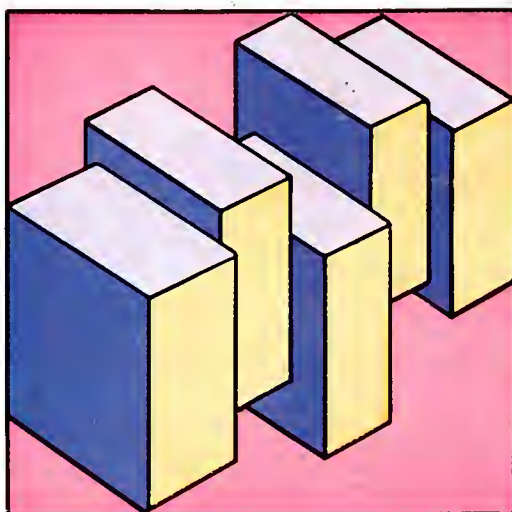
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to emotional harmony

Before prescribing, please consult complete product information, a summary of which follows:

INDICATIONS: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug. WARNINGS: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

PRECAUTIONS: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

ADVERSE REACTIONS: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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IN THIS ISSUE

Sickle Cell Disease and Pregnancy

Windsor A. Holt, M.D.



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Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety,

and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was on isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL One 25 mg tablet three times daily, one hour before meals. If desired, an additional tablet may be given in mid-evening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-006A / 1/70 / U.S. PATENT NO. 3,001,910



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Sickle Cell Disease and Pregnancy

WINDSOR A. HOLT, M.D.

The significance of pregnancy in the life of a patient with sickle cell anemia is ill-defined. As one reviews the literature it is obvious that many early articles dealing with the problem did not distinguish between "SA" (genes for sickle cell and normal A hemoglobin—i.e. sickle cell trait), "SC" (genes for sickle cell and abnormal C hemoglobin), and "SS" (homozygous for abnormal S hemoglobin or pure sickle cell anemia) hemoglobinopathies. Pauling¹ did not make the differentiation of the various hemoglobins by free boundary electrophoresis until 1949. Only since the introduction of filter-paper electrophoresis of hemoglobin by Spaet² have the variations of sickle cell anemia been readily differentiated. This paper will designate as SS those patients with relatively pure S mobility of hemoglobin, SC those with S and C mobility, and SA those with S and A mobility on electrophoresis.

As with many infrequent diseases, the literature has been distorted by the case reports portraying the fatal complications of sickle cell disease in pregnancy. Obviously, "reviews of the literature" have been further skewed by including the reported fatalities in their summation of the problem.

A pertinent question is: What risk is incurred by pregnancy in the SS, SA, and SC patient under current "adequate" prenatal care? Is maternal mortality with SC disease 0%³ or 37%?⁴ Is it 0%^{5,6} or 21.7%⁷ for SS disease?

Case Reports

This paper concerns two patients who

were diagnosed by electrophoresis as having SS hemoglobin before pregnancy, who subsequently became pregnant, and who were recently followed through pregnancy on the obstetrics service of the University of North Carolina.

Case 1

An 18-year-old Negro primigravida woman was first diagnosed as having SS disease at the age of five years when she was hospitalized with pneumonia. Her first admission to North Carolina Memorial Hospital was in 1958 (age 8) for lobar pneumonia and pleural effusion. She received blood during both hospitalizations. She subsequently did well until age 11 (1961), when she was treated for infectious hepatitis.

She was observed intermittently in the clinic and found to have hematocrit values generally between 19 and 21. A repeat hemoglobin determination by electrophoresis done April 5, 1967 revealed SS hemoglobin. No hemoglobin F was present.

She was first seen in the obstetrics clinic on May 8, 1968. Her last menstrual period was Jan. 7, 1968 and the expected date of delivery Oct. 14, 1968. Significant laboratory values were as follows: hemoglobin 6.1 gm, hematocrit 19%, reticulocytes 20.9%, and total bilirubin 3.3 mg/100 ml. She received 2 units of packed cells on June 5, when her hematocrit reading was 21% and reticulocytes were 22.7%. On June 19 the hematocrit was 22% and reticulocytes 11%. She was observed closely thereafter, with hematocrit readings ranging between 19% and 23% and reticulocytes consistently 20%-21%.

She was admitted on Sept. 17 and found to have increasing scleral icterus and pedal edema. Her total bilirubin was then 6.6 mg/100 ml. Other chemical laboratory values were normal.

On Sept. 23, 1968 she began to have severe left lower quadrant pain localized over the lower part of the uterus. She passed one to two teaspoons of blood per vagina. Sickle cell crisis was considered but felt to be unlikely. The uterus was tender and irritable and the cervix was closed. A presumptive diagnosis of abortion was made. The fetal heart rate was within normal limits.

The patient underwent a cesarean section and tubal ligation, losing an estimated 500 cc of blood. A

From the Department of Obstetrics and Gynecology, The University of North Carolina School of Medicine, Chapel Hill, North Carolina 27514.

Reprint requests to Major Windsor A. Holt, Maj. M. C., Lyster Army Hospital, Fort Rucker, Alabama 36360.

healthy 2,565-gram male infant was delivered. The placenta, weighing 380 gm, was fibrotic and had old adherent blood clots at one margin. The patient received two units of blood as well as low molecular weight dextran during the procedure. The dextran was continued 60 hours postoperatively. Her subsequent course was complicated by cystitis, which responded to appropriate antibiotics.

Case 2

The patient, a 21-year-old Negro primigravida, had been hospitalized at the age of three months with pneumonia and sickle cell crisis. She received multiple transfusions during the first 11 years of life, and had two episodes of pneumonia at age 11. After age 11 she experienced only mild to moderate bone pain and was not hospitalized again until June, 1966 (age 19), when she was first seen at North Carolina Memorial Hospital because of acute cholecystitis associated with cholelithiasis. Her hemoglobin electrophoresis showed S mobility with 4% fetal hemoglobin. The hematocrit was 21%. In July, 1966 she was started on a regimen of fluoxymesterone in an effort to bolster hematopoiesis. The hematocrit rose slightly, and in August, 1967 she underwent an elective cholecystectomy after receiving 3 units of blood. Her postoperative course was complicated by thrombophlebitis at an intravenous catheter site. No sickle cell crisis occurred. On Dec. 23, 1967 she was admitted with sickle cell crisis and pneumonia, which responded to blood transfusions and antibiotics. She was discharged on a regimen of fluoxymesterone and folic acid, 10 mg daily. Her last menstrual period was March 14, 1968, and when menses failed to occur on April 14, she discontinued the fluoxymesterone. Positive physical findings on May 20 included pallor, scleral icterus, functional systolic murmur, and a uterus compatible with 9 weeks' gestation. Laboratory values were normal except for a bilirubin of 5 mg/100 ml, hematocrit of 24%, and 9.5% reticulocytes. The patient was hospitalized four times during the pregnancy as follows:

1. May 26-28. Threatened abortion. No significant blood loss was sustained or medication given.
2. Oct. 2-8. Viral upper respiratory tract infection, which responded to humidity and other symptomatic measures. On Oct. 5 she experienced left tibial pain which she described as a crisis and for which she received low molecular weight dextran for 48 hours.
3. Nov. 5-9. Viral upper respiratory tract infection which again required only symptomatic treatment.
4. On Nov. 29 she was admitted with severe monilial vaginitis. After local treatment, labor was to be induced when cervical "ripening" had been accomplished. On Dec. 12 labor began spontaneously and after nine hours she underwent an elective low forceps delivery of a 3119 gm living male infant, under epidural anesthesia. She received low molecular weight dextran throughout labor.

A tubal ligation was subsequently done under local anesthesia on Dec. 13, 1968. There were no bacterial

complications at any time. Urine cultures were negative on May 20, June 14, Aug. 23, Oct. 8, and Dec. 12. Normal throat and pharynx cultures were obtained on June 18, Oct. 8, and Nov. 5. Table 1 summarizes the laboratory data. Table 2 shows blood volumes before pregnancy and near term. Table 3 shows the urinary estriol data.

Discussion

As the two reported cases were encountered, the obstetrical literature was reviewed in an effort to make a realistic prognosis for the patients in question. The heterogeneity of "sickle cell disease" as well as SS disease was quickly evident. A substantial number of SS patients produce detectable F hemoglobin. Jackson⁸ studied 61 SS patients and found that in 38 patients with 12% or more fetal hemoglobin, the clinical course was significantly more benign than that of the 23 patients whose erythrocytes contained no fetal hemoglobin or only trace amounts. The percentage of cells which can be induced to sickle at reduced oxygen tension correlates with the reciprocal of the concentration of fetal hemoglobin and not with the percentage of hemoglobin S." Thus, the clinical course is ameliorated by large amounts of hemoglobin F in SS patients.

Kraus¹⁰ reported two patients having hematocrit values of 22% and 27% with pure S hemoglobin demonstrated electrophoretically (one aged 72) who had no history of crisis. Further investigation showed that these patients were homozygous beta chain-S hemoglobin, but by virtue of glutamine replacing glutamic acid in the number 23 position of the alpha chain, a heterozygosity for alpha "Memphis" occurred. Evidently, alpha "Memphis" interferes with the interaction of an abnormal beta chain of one molecule with the alpha chain of another molecule which Murayama¹¹ deems necessary for sickling to occur.

It is well known that in heterozygous states of S hemoglobin (e.g., SA, SC, SD), the accompanying hemoglobin is a factor in the degree of sickling. Less reduced S hemoglobin is necessary to produce a gel in an SC than an SA combination.¹² Charache¹³ demonstrated the following order of magni-

Table 1
Laboratory Values
(Case 2)

Date	Weeks	Hemo- globin gm%	Hematocrit %	Reticu- loocytes %	WBC mm ³	Bilirubin D/T mg%	Alkaline phosphatase Bodansky units	SGOT units/ml	ESR mm/hr
2/16	Pre	8.9	24		14,150				
4/5	3+1	8.0	23		11,200				
5/20	9+4	7.8	24	9.5	12,600	1/5	7.4	50	3/3
5/26 ^a	10+3		24						
6/12 ^b	12+6		25	14.7	11,000				3/3
6/26	14+6		29	6.9	11,250	1.2/2.2	7.2		2/2
7/10	16+6	8.6	28		13,950				2/2
7/24	18+6		25	13.1	14,600				5/5
8/9	21+1		25		13,700				
8/21	22+6		24	13.6	13,350				5/5
9/4	24+6	8.9	25	14.6	14,300	1/4	9.8	66	3/3
9/18	26+6		26		13,600				
10/2 ^c	29	8.9	26	2.9	8,750				60/20
10/7	29+5	9.6	25	14.2	17,000	1.7/4	15.6	48	3/3
10/11	30+2		28		13,900				
10/23	32		27	15.3	12,950				
10/30	33		28	21.1	14,000				2/2
11/5 ^d	33+6		23	15.3	13,150	1.2/3			4/4
11/12	35		25	21.0	13,800				
11/20	36	9.4	24		18,200				
11/29 ^e	37+2		23	11.7	13,150				43/5
12/7	38+3	9.4	27	21.2	14,200	2.4/4.8			2/2
12/9	38+5		25	11.2	14,800				
12/13		8.9	23	17.1	16,000	2.8/4.2			
12/14			22	18.8	20,600				
12/15			22						
12/17			21						

Additional laboratory data:

Normal chest x-ray, normal EKG, normal Time test.
Circulation time 9-10 seconds during second and third trimesters.

a. Admission No. 1—threatened abortion

b. Transfused 2 units packed cells

c. Admission No. 2—upper respiratory tract infection

d. Admission No. 3—URI

e. Admission No. 4—vaginitis

tude of gelling in interactions with HbS:
D>C>J = A>F.

Effect of pregnancy

What has the obstetrical literature concluded about the effect of pregnancy on SS disease? Understandably, prospective studies with significant numbers of patients have not been done. The largest collection of patients with sickle cell disease reported was that of Eisenstein⁷ in 1956. He reviewed 138 cases of sickle cell anemia associated with 386 pregnancies. Thirty mothers died during delivery or shortly thereafter. Rywlin¹⁴ pointed out: "Of the 30, 24 were autopsied. Of these, 15 had splenomegaly. Although electrophoretic studies of hemoglobin were not available, there is con-

siderable justification in assuming that the patients with large spleens had hemoglobin C and S disease. It follows then that in 15 of the 24 cases in which autopsies were performed, death was due to C and S disease." Watson¹⁵ studied 115 patients with SS disease; 21 had splenomegaly, but only 5 of 53 over age 19 had it. Henderson¹⁶ reported splenomegaly in 3 of 54 adults with SS hemoglobin. Conley¹⁷ never saw splenomegaly in SS disease patients older than 10 years.

Smith⁴ reported splenomegaly in 75% of SC patients. River,³ in a clinical study of SC hemoglobinopathy, reported that 50 of 75 patients had splenomegaly. Interestingly, splenomegaly in SC disease could not be correlated with age or symptomatology, but

Table 2

(Case 2)

Blood Volume Determinations in Milliliters

	7/18/66	12/4/68
Predicted RBC volume	1428	1886*
Calculated RBC volume	868	1670
Predicted plasma volume	2558	4013*
Calculated plasma volume	3855	5030
Predicted blood volume	3986	5899*
Determined blood volume	4723	6700
Hematocrit	18%	24%

*Predicted volumes based on weight plus 48%³¹ increase in blood volume in late pregnancy and 32%³¹ increase in RBC volume in late pregnancy.

there was an increased incidence of splenomegaly in women who had been pregnant.

It is fair to state that the high maternal mortality and morbidity reported for SS disease (Eisenstein reported a mortality of 21.7%, but, corrected for the total number of pregnancies, it is only 10.5%) has been exaggerated by the failure to distinguish SS from SC in many older studies.

Laros¹⁸ summarized the results of pregnancy in 283 SC women. Twenty-nine deaths occurred in this group, giving a maternal mortality of 10.3%. This rate, of course, must be corrected by the total number of pregnancies involved, as must Curtis's¹⁹ figure of 4 maternal deaths in 16 SC patients, and Smith's and Conley's⁴ of 3 deaths in 8 women. These alarming reports should be balanced against River's³ data of no maternal deaths in 25 patients with 87 pregnancies. The true maternal mortality is probably less than 5% for SC disease, and this figure is probably higher than for SS disease, if the natural course of SS disease is considered. Only modern prospective studies will offer the answer, and pooling of such data seems necessary.

In the pathogenesis of sickle cell crisis there is a vicious cycle of stasis—temporary small vessel obstruction—anoxia, sickling further stasis, etc. Treatment of crises depends on their manifestations and seriousness. Fatigue, exposure to cold, stress, infections, fever, dehydration, and acidosis may all induce crisis.

Treatment

Numerous agents and techniques have been used for the treatment of crisis. Since

Table 3

(Case 2)

Date	Twenty-four Hour Urinary Estriols in Milligrams	
	Uncorrected	Corrected*
10/3	4.1	4.9
10/22	5.8	8.3
10/29	9.4	11.9
11/5	18.9	22.2
11/7	14.4	23.7
11/19	15.8	19.3
11/21	21.5	28.9
11/24	16.9	25.1
11/26	20.4	28.9
12/1	16.6	21.8
12/3	18.2	34
12/4	15.6	21.1
12/5	22.7	29.3
12/6	14.8	27.3
12/7	22.5	31.9
12/8	26	40.5
12/9	lost	
12/10	lost	
12/11	16.2	21.1

crisis can be transient and self-limiting, carefully controlled studies for evaluation of treatment are difficult to perform. Magnesium sulfate,²⁰ plasma expanders, alkali, oxygen therapy, anticoagulants, induction of chronic methemoglobinemia, phenothiazines, and folic acid;²¹ partial exchange transfusions;²² carbon monoxide inhalation;²³ and acetazoleamide²⁰ have all been advocated as useful in either the treatment or prevention of sickle cell crisis. Everyone agrees that analgesics are useful.

Keeping in mind the physiological changes occurring in pregnancy and the unique problems of the SS patient when pregnant, the following outline of prenatal care is presently followed in our clinic for diagnosed cases of SS disease. (Obviously any pregnant anemic patient should have "sickle cell disease" confirmed or excluded).

On the first visit, a baseline EKG, chest x-ray examination, tuberculin skin test, blood type, STS, and Coombs test are performed. The husband's blood is electrophoresed. In addition, a urine culture, complete blood count, reticulocyte count, red blood cell indices, erythrocyte sedimentation rate, urinalysis, and serum bilirubin values are followed serially throughout the pregnancy. Folic acid and multiple vitamins are given daily. Prenatal visits are frequent.

Any new symptom is completely evaluated. Hospitalization is used freely. Urinary estriol values are followed serially in the last trimester. The patients are hospitalized for delivery at 36-37 weeks with labor induced with intravenous Syntocinon when the cervix is "ripe." Conduction anesthesia is used—preferably caudal or epidural. Low molecular weight dextran is given from the initiation of the induction until to 24 to 48 hours post partum. The patient is kept hydrated during labor. Puerperal sterilization is accomplished if accepted by the patient.

The use of folic acid in SS disease, especially during a pregnancy, is strongly advised. Many reports in the literature attest to the increased incidence of folate deficiency in chronic hemolytic states.²⁴⁻²⁶ It is important to realize that "physiologic doses" of folic acid for normal patients and normal pregnancies are far below those of the comparable nonpregnant and pregnant patient with SS disease. Five to 15 mg of folic acid per day is adequate.

We have found a close correlation of reticulocytosis with the clinical course of the disease. In case 2 there were significant reductions in reticulocytes after transfusion (6.9% on June 26), during an upper respiratory infection (2.9% on Oct. 2), and in association with vaginitis (11.7% on Nov. 29). On adequate dosages of folic acid we have routinely seen reticulocyte counts of 18%-25% during pregnancy.

Controversial aspects of the management in the foregoing cases as outlined are:

1. Early hospitalization and induction of labor.
2. Use of conduction anesthesia in severe anemias.
3. Use of low molecular weight dextran.
4. Lack of transfusions given prophylactically during pregnancy.
5. Use of urinary estriols as a guide to prognosis.

Horger,²⁷ in a retrospective study, indicates that labor need not be induced on the basis that "No babies were lost after 32 to 33 weeks," in a series of 28 pregnancies. However, McCurdy²⁸ found a 10% inci-

dence of antepartum hemorrhage in his SS patients. We do not feel that maternal risk is increased in induced labors.^{29,30} On the other hand, it is highly desirable to have a well controlled labor room-operating room-blood bank milieu when labor occurs in SS patients.

The use of conduction anesthesia is justified by its comfort for the mother and minimal effect on the baby. As has been shown in normal pregnancy, blood volume is not diminished in the third trimester of pregnancy unless toxemia or some other dysfunction is playing a role.³¹ See Table 3 for a comparison of the pre-pregnancy blood volume with the pre-delivery volume in case 2. (Note: Lugol's solution should be given to protect the fetal thyroid gland in a blood volume determination by radioactive iodine).

We are not prepared to advocate low molecular weight dextran for sickle cell crisis. There are conflicting reports in the literature regarding its effectiveness.³²⁻³⁴ We do feel, however, that with close cardiovascular monitoring, an effort to prevent crisis is worth while and this, together with the improved tissue perfusion which is so important for the SS patient in labor or surgery, is our justification for its use. While surgical procedures are not appreciably affected by its anticoagulant effect, blood for typing and cross-matching should be taken before the infusion is started because of typing difficulties caused by dextran. Atik³⁵ reported his prophylactic use of dextran in general surgical procedures and was impressed with its value.

Prophylactic blood transfusions, partial exchange transfusions, or total exchange transfusions during pregnancy or in anticipation of delivery are not in the patient's best interest. Case 1 in the present study presented the only justification for transfusion, although both patients had transfusions. Partial exchange transfusion has been recommended not only in severe sickle-cell disease⁽²²⁾ but routinely in the third trimester of pregnancy.³⁶ Obviously, much blood is wasted and many unnecessary risks are taken in such a practice. This is

overtreatment. In complicated circumstances, however, transfusion is often necessary.

The prognostic usefulness of estriol determinations in SS disease is yet to be determined. Beischer³⁷ found low estriol excretion in approximately 25% of patients with anemia in pregnancy. He found a significant incidence of anemia in a low estriol group of patients as compared with a normal estriol group.

An interesting area for investigation is the effect of the increased hormone levels associated with pregnancy on erythropoiesis and RBC survival. Rucknagel³⁸ found a significant elevation of fetal hemoglobin detected in 10 pregnancies during the second trimester, with a subsequent fall in the third trimester. The sensitivity of the method was such that fetal sources were eliminated. The suggestion that acute hormonal changes early in pregnancy may be responsible for reactivation of a fetal erythropoietic anlage was made. Certainly, as already pointed out in this paper, increased hemoglobin F may contribute to a more benign course in SS disease. Other experiments have suggested that progesterone or testosterone may halt the sickling process.³⁹ Perhaps when sufficient prospective data are available, a case for the beneficial effect of pregnancy on an SS patient will be made. Nevertheless, at present, because of the genetic implications of SS disease, and because the average life-span of those who carry it usually does not extend beyond the late second or early third decade of life, we feel that sterilization should be seriously considered in these patients.

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Etiological Factors in Endometriosis with Report of a Case with Reflux Menstruation

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Case Report

A 14-year-old Negro girl was seen initially in the emergency room of the Memorial Hospital of Alamance County on Nov. 7, 1965. She complained of progressively severe lower abdominal pain of about one week's duration, which had been more pronounced in the left lower quadrant. During the 24 hours prior to her visit, the pain had become more generalized and more intense, accompanied by low-grade fever and nausea and vomiting. She had also suffered from considerable rectal pain and pressure, but had noted no change in bowel habits. Her menstrual flow had begun five days prior to this visit, at the expected time, and was "usual" in amount.

History

The patient had experienced the menarche at the age of 12, and for more than a year had suffered severe dysmenorrhea in the form of lower abdominal pain. Further, she stated that she had suffered recurrent aching pain in the left lower quadrant for about half of each month, more pronounced at the time of menses. Because of these problems she had missed from two to three days of school each month. Menses occurred regularly at 28-day intervals and lasted from four to five days. The flow had never been excessive. The remainder of her past medical history and systems review was non-contributory.

Physical examination

The patient was a well developed Negro

girl who was obviously seriously ill and extremely apprehensive. The temperature was 100.8 F, pulse 108, respiration 24, and blood pressure 130 systolic, 80 diastolic. Positive physical findings were confined

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to the abdomen and pelvis. The abdomen was slightly distended and tympanitic. There was moderate tenderness, rebound tenderness, and muscle-guarding throughout. Bowel sounds were normal to hyperactive. No masses or organs could be outlined. Pelvic examination disclosed a moderate amount of dark blood in the vagina. A tense, exquisitely tender, smooth mass filled the cul-de-sac, but was difficult to outline because of the patient's pain and fear. Rectal examination confirmed the presence of a markedly tender, nondiscrete fullness anteriorly, which impinged on the rectum.

The hemoglobin was reported as 12.2 gm, hematocrit 37%, white blood cell count 15,500, with a shift to the left. Urinalysis of a catheterized specimen was unremarkable. The urine was negative for chorionic gonadotropin. A flat plate of the abdomen was essentially normal.

Course

The patient was admitted to the hospital, and several hours later laparotomy was carried out. Several hundred cubic centimeters of dark blood and chocolate-colored material was found in the abdominal cavity. A bicornuate uterus with the left horn distended and tense was observed. This horn formed a confluent fusiform mass with the left

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tube and ovary, measuring 10 by 5 by 5 cm and containing heavy chocolate-colored material. There were many endometrial implants in the cul-de-sac and over the perirectal peritoneum. Incidental findings were incomplete rotation of the large bowel, location of the appendix in the right upper quadrant, and absence of the left kidney.

The left uterine horn, tube, and ovary were removed. There was no communication between the left uterine horn and the cervix or vagina. An intravenous pyelogram obtained in the postoperative period showed no evidence of a left kidney. The right kidney was enlarged, but the collecting system and ureter appeared normal.

The postoperative course was uneventful and the patient was discharged on the eighth postoperative day. At six weeks she reported that she had had a normal menstrual period with minimal discomfort. During the next six months she continued to have normal menses with very little dysmenorrhea.

Review of the Literature

Although Von Rokitsansky¹ probably authored the first definite reference to endometriosis in 1860, it was not until Sampson's classic paper² in 1921 that interest in the subject became widespread. The story of endometriosis comprises one of the most fascinating chapters in the history of medicine. Its etiology, or perhaps more properly its histogenesis, has been the subject of one of medicine's greatest debates—one which is not yet resolved.

There are three basic theories concerning endometriosis:

1. The theory, first espoused by Sampson, suggesting that endometrial tissue is transplanted from the uterus to ectopic locations by regurgitation, by "benign" metastasis, or by direct extension.
2. The theory suggesting that ectopic endometrial tissue develops *in situ* from local tissues either by way of cell rests or by metaplasia.
3. Theories suggesting a combination of transplantation and development *in situ*.

Our case would seem to substantiate the theory of Sampson.

For this theory to be acceptable, it must be established that (a) viable endometrial cells are present in menstrual blood, (b) endometrial cells will grow when transplanted, and (c) retrograde menstruation does indeed occur.

Initially, the viability of cast off endometrial cells was strongly doubted by most authorities; and Novak and TeLinde,³ in 1924, reasoned that menstrual discharge was necrotic, was acted upon immediately by proteolytic enzymes, and contained autolysed constituents incapable of living or growing elsewhere. Later work by TeLinde, however, reversed this belief. Meyer⁴ also felt that shed endometrial cells were not viable, but he was not dogmatic in his disbelief.

In 1927 Cron and Gey⁵ were able to keep endometrial tissue alive in culture for a month, but their specimens were obtained with a curet and were not normally desquamated cells. Later, however, Keetel and Stein⁶ reported that "cast off endometrium obtained from menstrual fluid has been grown in tissue culture using a natural medium."

While several investigators, notably Heim^{7,8} and Hartman,⁹ were unable to produce endometriosis by introducing endometrial cells into the peritoneal cavity of monkeys and human beings, TeLinde and Scott¹⁰ reported that endometriosis could be produced in the abdominal cavities of monkeys by transecting the cervix, closing the stump, and turning the uterus with the remaining portion of the cervix so that menstruation would take place intra-abdominally.

We are all familiar with the outstanding work of Markee¹¹ in which he observed cyclic changes in endometrial implants in the anterior chamber of the eye of monkeys. In only one of his cases did re-implantation take place from the shed menstrual endometrium. In 1956 Fallas¹² reported a case strikingly similar to ours, in which a uterine anomaly resulted in extensive endometriosis due to retrograde menstrea-

tion. Ridley¹³ also reported a case resulting from a form of congenital occlusion.

In all of these cases, reflux menstruation took place in the presence of obstructive phenomena. There is also evidence that retrograde menstruation occurs in the absence of obstruction. Goodall¹⁴ believed that in about 50% of the cases when the abdomen is opened during menstruation, blood could be seen spilling from the tubes. Watkins¹⁵ also aspirated and examined bloody fluid from the cul-de-sac during menstruation, and found endometrial cells present.

Finally, in 1958 and 1961, Ridley and Edwards^{16,17} collected menstrual blood during the first 24 hours of flow without trauma and without invading the endometrial cavity. These elements were then successfully implanted into the lower abdominal wall. Care was taken to choose sites of implantation apart from expected drainage routes of pelvic lymphatics.

Summary and Conclusion

A case of endometriosis in a 14-year-old girl exhibiting obstruction to normal menstrual flow due to uterine anomaly is presented. The etiological theories of endometriosis are listed and the literature is explored with regard to Sampson's theory of reflux menstruation with re-implantation. Attention is also directed to several cases similar to the present one.

There appears to be ample evidence to

support the theory of reimplantation of endometrial tissue in ectopic sites.

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A flux of blood, from the anus, is not always to be treated as a disease. It is even more salutary than bleeding at the nose, and often prevents or carries off diseases. It is peculiarly beneficial in the gout, rheumatism, asthma, and hypochondriacal complaints, and often proves critical in colics, and inflammatory fevers.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Philadelphia, Richard Folwell, 1799, p. 242-243.

Radicular Sensory Neuropathy: An Unusual Cause of Lower Extremity Ulcers

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Chronic ulcers of the lower extremities represent one of the more common and often misunderstood problems encountered in surgical practice. The ulcers frequently stem from vascular, infectious, neurological, or traumatic origins. At times multiple causes can be detected. One of the rare predisposing factors for a chronic ulcer is an entity entitled sensory radicular neuropathy. This disease has been well recognized in the neurological literature,³ but has not been emphasized in the surgical literature. The recent opportunity to see and treat a patient with this unusual disorder prompts this report.

Case Report

A 29-year-old white man was referred for evaluation of a persistent ulcer on the plantar surface of his right foot. He had enjoyed good health with the exception of an eight-year history of decreased sensation in his right foot. He had noted a marked decrease in pain and touch sensation, but could detect position changes. He had noted similar changes in sensation in his right hand for one year. Paresthesias in the lower extremity occurred frequently.

Fourteen months prior to admission, an ulcer developed on the plantar aspect of the patient's right foot. When self-treatment failed to result in improvement, he consulted his physician. Over the next few months, all attempts at local treatment failed, and results of numerous diagnostic procedures, including special studies for diabetes and vascular disorders, were within normal limits. The patient's grandfather had diabetes and the father had angina, but there was no known history of neurological disease in the family.

Physical examination: The pulse rate was

82, respiration 18, temperature 37 C, and blood pressure 130/85. A complete physical examination disclosed no abnormalities with the exception of a 2 x 2 cm punched-out ulcer beneath the right first metatarsal phalangeal joint (Fig. 1). There was a small amount of edema surrounding the ulcer, but no tenderness, redness, or increased local heat. Peripheral pulses were all easily palpable and equal bilaterally.

Neurological examination: The patient's mental status was normal. The cranial nerves were normal. The motor examination failed to demonstrate any weakness. The cerebellar functions were normal. Sensory examination revealed a decreased appreciation of pinprick, in a "stocking-glove" distribution, in both hands and feet. The decrease was more marked on the right than on the left. A decrease in position sense was present in all extremities except the left hand. There was a decrease in vibratory sense, more pronounced in the hands than in the feet, and more pronounced on the right side of his body. The deep tendon reflexes were absent. No pathological reflexes were noted.

Laboratory studies revealed the following values: hematocrit 44 vols %, hemoglobin 13 gm/100 ml, white blood count 4,600. The urine was clear. Stool was guaiac negative. Routine chest roentgenograms, electrocardiogram, electroencephalogram, audiograms, and admission chemistry values, including fasting blood sugar and uric acid, were normal. The serological test for syphilis was negative. Multiple roentgenograms of the right foot showed no osseous, articular, or soft tissue abnormalities. Cultures of the ulcer were positive for *Staphylococcus epidermidis* and *Pseudomonas*. Angiograms were normal. An electromyogram revealed normal motor conduction time in the median nerve. Sensory conduction time could not be determined because of insufficient sensation in the digits.

Hospital course: Following admission

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Fig. 1. Ulceration over head of first metatarsal at the time of admission.

evaluation the ulcer was debrided. Seven days later, a split-thickness skin graft was applied to the ulcer and a biopsy of the sural nerve was performed. Histological study revealed significant neural (Wallerian) degeneration. There was loss of axons and myelin represented by mucoid degeneration. The endoneurium was not altered, but some fibrosis of the perineurium and prominent fibrosis of the epineurium were present.

Postoperatively, the patient did well, the skin graft healed (Fig. 2), and he was discharged with instructions to protect his extremities. He was asked to wear special shoes and avoid prolonged standing or walking. He was instructed to inspect his feet and hands frequently.

Discussion

Nelaton¹ published the first report of "perforating ulcers of the feet" in 1852. Early in this century, the occurrence of perforating ulcers in several members of one family was noted, and in 1922 Hicks² reported ten mem-



Fig. 2. Photograph of the foot showing healing of the ulceration ten weeks after discharge from the hospital. The edema and inflammation which appear in the photograph appeared after a hard day's work "in the yard," and subsided after a few days' rest. The patient was warned to protect his feet.

bers of one family with perforating ulcers of the feet, shooting pains, and deafness. In 1951 Denny-Brown³ had the opportunity to perform an autopsy on one of Hicks' patients and noted severe degeneration of the dorsal nerve roots, whereas the ventral roots were intact. The peripheral nerves in the involved segments showed a patchy loss of nerve fibers with no evidence of regeneration. He considered this to be the most likely etiology of the many reported series of "familial perforating ulcers," and named the syndrome "hereditary sensory radicular neuropathy."

Since then, additional cases have been reported.^{4,7} The syndrome is said to be "characterized by the familial occurrence of a sensory deficit in the distal lower limbs associated with chronic perforating ulcerations of the feet and progressive destruction of underlying bones."⁸ Some patients have as-

sociated deafness and parasthesias or "lightning pains" in the legs, and about half have sensory involvement of the upper extremity. Characteristically, the onset is in the second and third decades and there is no muscle atrophy or loss of motor function. The condition is said to resemble most closely the peripheral neuritis of longstanding diabetes,^{3,4} but none of the reported patients have been diabetic. The condition is usually familial and is considered to be transmitted by a mendelian dominant gene, although sporadic cases have been noted. Although Denny-Brown considered the ulcer to be the result of unrecognized recurrent trauma, because of the loss of pain sensation, others attributed it to a loss of vascular reflexes.⁴

The case reported here is a typical example of this disorder with regard to the distribution of sensory loss, the paresthesias, the age of onset, and the lack of muscle weakness or atrophy. The sural nerve biopsy showed neural degeneration with perineural fibrosis. The normal motor nerve conduction time and the indeterminable sensory nerve conduction time are similar to findings in a previously reported case.⁸ The patient did not demonstrate the deafness or bony destruction which has been described in some patients, although these features may develop later. Finally, he must clearly represent one of the so-called "sporadic" cases of this disorder, as there was no family history of the disease.

Hereditary sensory radicular neuropathy, therefore, represents an entity which should be considered in the diagnosis of chronic ulcers of the lower extremities in order to treat them intelligently.

Usually the ulcers respond to conservative treatment and heal once the patient is advised to protect the area. Because such treatment had previously failed in this patient, and because he was young and needed to return to work as soon as possible, a skin graft was successfully applied. The patient has returned to work with shoes specially prepared to distribute over his entire foot the pressures from standing and walking. All patients with this condition must be warned of the possibility of recurrences and of the importance of protective shoes and proper foot care. When the hands become involved, the patients must be warned (particularly those who are likely to subject their hands to trauma) to protect their hands also.

Summary

A case of a chronic foot ulcer secondary to hereditary sensory radicular neuropathy is reported. The history of this diagnosis and its characteristics are outlined. The importance of considering this disorder when managing patients with chronic lower extremity ulcers is emphasized.

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Breeding women are very subject to the tooth-ach, especially during the first three or four months of pregnancy. The tooth-ach often proceeds from scorbutic humours affecting the gums. In this case, the teeth are sometimes wasted, and fall out without any considerable degree of pain. The more immediate cause of the tooth-ach is a rotten or carious tooth.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Mediciens*, etc., Philadelphia, Richard Folwell, 1799, p. 256.

Audiometric Testing and Rehabilitation of the Pre-School Child

DONALD F. BYNUM*

If you have practiced in the state of North Carolina very long, perhaps you can remember seeing for the first time a year-old child with a suspected hearing loss. Based on your case history, your examination, and the child's lack of response to the tuning forks or any other sound stimuli, you told the parents you felt the child was deaf. You could suggest a return appointment in a year or several years, perhaps get some response from the child to a pure tone test at the age of four, and then arrange entrance into the School for the Deaf at the age of five.

Even as the trio left your office, you would have liked to know more about this child—his hearing potential with and without amplification, his educational potential, *etc.*—realizing as they left that, without help before the age of five, this child would lose the most important years of his life for the development of the communicative skills.

Early Recognition

During the past five years there have been many changes in the evaluation and training of the pre-school deaf and hard-of-hearing child here in North Carolina. Perhaps you have had children referred to you at an earlier age because of an alert pediatrician and an increased public awareness of hearing loss. Much of this has been due to the rubella epidemic of three years ago.

In addition to your thorough case history and examination, Hardy¹ suggests these danger signals:

If a neonate does not exhibit a startle reflex in response to a sharp clap within 3-6 feet.

If at three months the child has not developed auditory orienting reflexes.

If at 8 to 12 months the child does not turn toward the source of a whispered voice (30-40 db) or such sounds as a rattle, spoon in a cup, or tissue paper—all originating within 3 feet behind the child, whose attention has been gained by a nurse, while his mother holds him.

If at 24 months the child cannot identify an object by verbal stimulus, cannot repeat a word with a single stimulus, cannot repeat a phrase and does not use some short phrases in talking.

If parents report that the child is not awakened or disturbed by loud sounds, does not respond when called, pays no attention to ordinary crib noises, uses gestures almost exclusively to establish needs and desires in lieu of verbalization or watches parents' faces intently.

If the child has a history of upper respiratory infections and chronic middle ear trouble.

Note: Any of these symptoms may result from other deficits alone or in combination with a hearing loss. Their presence however, should be considered a sufficient reason for further assessment.¹

When do you begin? As soon as possible. The Ewings of England have taught us the feasibility of the early measurement of hearing and the feasibility of detecting defects in the youngest infant.

Any serious deficit of the hearing system certainly interferes with the normal development of speech and language and the child's ability to respond to his environment.

Sataloff² says in his latest book: "Parents never should be told that a child is too young to have his hearing tested if there is sufficient need and justification for such a study. The earlier a hearing defect is detected and treatment begun, the better." . . . "Whenever a physician suspects a hearing loss he should seek more definitive and qualitative evaluations."

Needless to say the team approach is

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needed for the detection, diagnostic appraisal, treatment, and rehabilitation of the hard-of-hearing and deaf child. Perhaps the otologist is the logical person to coordinate this team, especially during its early stages of investigation. The pediatrician, the audiologist, the neurologist, and the psychologist may all be called upon as team members.

Neonate Testing and Re-evaluation

When do you begin? Again, as soon as possible. Neonate testing is now a common practice in a number of medical centers throughout the world. These screening tests, supervised by an otologist and audiologist, are usually administered in the newborn nursery. The purpose is to identify newborn infants who may have congenital hearing loss of a severe nature, by determining whether there is a startle or a blink response to sound stimuli presented at a very loud intensity. The percentage identified is indeed small, but it is felt that this procedure is most worth while and will be more routinely practiced in the future.

Among the consultations that may be requested by the otologist is that of an audiological assessment in a hearing and speech center. The responsibility of the clinical audiologist is to describe the child and his hearing potential as thoroughly as possible. This must be accomplished by using a wide variety of techniques and instruments, depending on the developmental level of the child. In the pre-lingual level, the audiologist can observe the child's reactions to noises and vocal stimuli in the play situation and in the controlled two-room testing procedure, through both free field and headphone testing. Speech, pure tones, calibrated noise-makers, music, complex and white masking noises, and the like can be presented at various intensity levels to determine thresholds of awareness of sound levels. The audiologist must know the frequency and intensity levels of the sounds presented. Supportive information may be gained by electrodermal or GSR audiometry.

Response, or the lack of response, to these stimuli can only be interpreted in the light

all other medical findings and clinical observations.

Doubtless, in the future, experimental work now being done with electroencephalographs and computers will be standardized, and will provide additional information as a series in the battery of tests.

Periodic re-evaluations may confirm the early findings. At the preschool level, or age three, modifications of more standardized tests may be utilized and more accurate results obtained. Various forms of play audiometry in speech and pure-tone testing may reveal more diagnostic information as to the level of hearing in each ear, ability to discriminate, and the degree of sensorineural involvement. By this chronological age the child will have reached other developmental milestones which would tend to confirm the original diagnosis or indicate further complexities of the total problem. The various developmental levels are described in detail by Hardy in Glorig's book, *Audiology*,³ written especially for otologists.

Differential Diagnosis

Differential diagnosis is critical in the three-year-old child who has no speech or language and/or who does not respond to sound. Mental retardation, aphasia, emotional disturbances, and autism may all be confused with deafness. So many children seem to have characteristics that suggest any or all of these conditions; it seems difficult just to find a hard-of-hearing child these days! Mantell, in McConnell's book, *Deafness in Childhood*,⁴ adds another grouping which must be recognized: "... there are homes in which parents are so lacking themselves in intelligence, education or sensitivity, or are so pressured by life, that they don't give their children the stimulation essential to normal childhood development."

A wide variety of specialists are essential for adequate differential diagnosis.

A few brief comments about the types of hearing loss and their relationship to the development of speech and language may be in order.

It seems to be often overlooked that even

a relatively mild conductive hearing loss can be a great detriment to the acquisition of speech and language, if it occurs persistently during the first 18 months of life.

House⁵ has recently cautioned against overlooking the conductive component superimposed on a sensorineural loss. He says: "The correction of even a mild conductive component to a child with a severe hearing loss is most important, . . . a few decibels change to a severely impaired individual makes a great deal of difference especially in the ability to use a hearing aid."

The high-frequency sensorineural hearing loss has probably caused as much confusion, and often mislabeling, as any other type of hearing problem. How many times has an unsuspecting physician, without even doing a screening hearing test, declared that a child with this defect could hear normally? The child's speech continues to develop slowly or is poorly articulated, and he becomes a behavior problem or is labeled a slow learner after failing several grades. Finally, it is found he has a high-frequency hearing loss. The fact that he can hear conversation in the office does not mean he can hear in the noisy classroom or the auditorium. *That he appears to hear and understand* is insufficient evidence for the normal development of the child's communicative while and see" attitude usually means more while and see" attitude usually means more time lost and does not suffice for a thorough audiometric evaluation. We need to find out as much as possible, as soon as possible.

By the same token, the geriatric patient with presbycusis and basically the same hearing pattern, is accused of "convenient hearing," ("he can hear what he wants to") and is convinced this is one of the penalties of old age that he must accept and learn to live with.

Management and Rehabilitation

There is no substitute for a thorough audiometric evaluation and rehabilitation by a clinical audiologist. The parents, the family, the teacher, and the child himself, must understand as much about his hearing problem as possible. The day has come

when almost all patients with hearing losses, from the very young to the very old, can be benefited by the use of amplification if the device is properly fitted and followed by some training. It seems unwise, and perhaps unjust to the child and his family, to refer him to a hearing aid dealer, "to see if an aid will help," when there is a clinical audiologist and a hearing and speech center within a 50 or 75 mile radius. In fact, we have parents who travel 160 miles per day for their children to be enrolled in our pre-school deaf program. The time, distance, and costs are minimal, when compared to a child's handicap and the life time he must live with it.

There is much more involved for the child and his family than just buying the least expensive—or the most expensive—hearing aid available. The audiologist usually spends several hours or several appointments in the evaluation and trial of hearing aids before recommending one. The child and his family must understand the nature of his hearing loss as well as they can, and understand and accept the child's potentials and his limitations with and without a hearing aid. They must be channeled to the proper source for help in purchasing a hearing aid if they are medically indigent, usually through the Crippled Children's program, a civic club, or foundation.

What can be done and how soon can you begin? Just as soon as a hearing loss is suspected. You must not underestimate your own important role in getting these parents started as early as possible. To paraphrase Lowell⁴ of the John Tracy Clinic: "The doctor who stresses the importance of an early evaluation and training to the parents, who tells them, 'This is what you must do,' almost in the form of a prescription, is a great asset to the audiologist and the educator in providing the maximum for the child."

Use of a hearing aid

Just as soon as the audiologist is reasonably sure as to the degree of the hearing loss, and has received clearance from the otologist, a hearing aid should be recom-

mended. In our center this may be at nine months to one year of age. In some centers aids are fitted at nine weeks instead of nine months. The parent should be given continual guidance and training as well as the child. We offer a home-bound program for this purpose, until the child is two years of age and can begin group classes. Six months after we opened our center in Charlotte, we had 24 deaf and hard-of-hearing children under four years of age attending regular classes taught by a trained teacher of the deaf. There are approximately 75 other such children attending other newly developed programs in Gastonia, Durham, Greensboro, and Raleigh.

While the classes for the children are only two hours long, the parent continues teaching in the home. Regular monthly meetings for both parents are held in the evenings. The training for the family is almost as important as that of the child at this early age.

After the otological and audiological evaluations and a hearing aid evaluation, the school-age child needs training in a speech and hearing center to learn to use and accept his aid. Even with a minimal hearing loss, a child needs speech, reading, auditory training and speech and language development. Unfortunately this training is not available in most of our public schools, even in the larger cities.

As otologists, you hold the key for the child as well as the adult with a hearing handicap. Early diagnosis and subsequent training may make the difference between a hard-of-hearing child and a deaf child.

Needed Services

In order to discover and help the hard-of-hearing and deaf child, we should direct our attention to a number of needed services which have not yet been developed.

1. A state-wide registry of hard-of-hearing and deaf patients at some central location would be advantageous. As soon as a child is found to have a permanent hearing loss, the file should be begun. Additional information would be added by others who work with the child. This would at least partially prevent the loss of

children for years, with nothing being done for them in the way of hearing aids and training. The registry could be kept on any level, state or local, but would be effective only if supported by the organization of otologists.

2. We need to press for hearing screening tests in all our public schools, and preferably for pre-school children.
3. State support for pre-school deaf programs and the establishment of new ones in areas where none exists is needed. It is estimated that less than one-third of the "rubella babies" have been seen for evaluation and training. In the next two years many of them will be coming to your offices.
4. Supplementary programs in aural rehabilitation, speech reading, auditory training, and speech and language development for the hard-of-hearing are needed in our public schools.

Our responsibilities lie outside as well as inside the office. Only by personal and group involvement at both the state and local levels can these goals be accomplished.

Summary and Conclusion

Great advances have been made in the development of better methods of treatment and surgery for those with hearing handicaps. More scientific and more accurate hearing tests and testing equipment have been developed. The fitting of hearing aids and pre-school education add four or five years of intellectual development to a deaf child's life.

In North Carolina five years ago, hearing and speech centers were confined primarily to the three medical centers. Now there are 11 centers scattered over the state as well as the five pre-school programs mentioned previously. Surely we are just beginning to see the horizon and to catch a glimpse of what can be and needs to be done.

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Ocular Localization in Larva Migrans

HAROLD N. JACKLIN, M.D. AND L. B. HOLT, M.D.

Intraocular parasites are assuming increasing importance in ophthalmic pathology.^{1,2} Once felt to be ophthalmological curiosities, these parasites have become important causes of blindness in the United States as well as elsewhere. Wilder,³ who first described nematode endophthalmitis in 1950, included several North Carolina cases.

Infective ova of *Toxocara canis*, the dog or cat nematode, may be inadvertently ingested by direct contact or from contaminated soil. Hematogenous larval migration through the intestinal wall to the liver or lungs is called "visceral larva migrans." This condition—characterized by hepatomegaly, eosinophilia, and pneumonitis—may produce clinical or subclinical signs and symptoms.^{4,5} In an occasional patient, the 400 micron larvae do not lodge in the hepatic or pulmonary network and are carried via the systemic circulation to other sites including the eye.^{6,7} Unable to complete the life cycle, the larvae die, become encysted, and produce a typical eosinophilic granulomatous lesion.

Ocular signs and symptoms may not be recognized until months or years following the initial migration. Within the eye, the larvae may localize in the aqueous, vitreous, choroid or retina or cause a generalized endophthalmitis.⁸⁻¹⁰ The presenting ocular findings may simulate retinoblastoma.^{11,12} The following cases illustrate the complexity in the diagnosis and management of this problem.

Case Presentations

Case 1

The parents brought their 3½ year old boy in as an emergency, with the chief complaint that they had seen a "cat's eye" look in the child's eye the night before.

Ocular examination: Visual acuity revealed no light perception. A large elevated white mass was seen

behind the lens, filling two thirds of the vitreous cavity. A diagnosis of possible retinoblastoma was made and the blind eye enucleated. Pathological examination at the University of California showed a fibrous mass behind the lens, total retinal detachment, and large numbers of eosinophils and giant cells about hyaline capsular material, indicative of nematode endophthalmitis.

A serological test for *Toxocara* was negative.

The child's other eye was observed at intervals for six years, and found to have 20/20 vision.

Comment: In this case, in the presence of impaired vision, a prominent anterior vitreous or retrolental mass, and an unobserved fundus, enucleation was performed for diagnostic purposes. Retinoblastoma could not be ruled out. On pathological examination, the eosinophilic granulomatous retrolental mass was characteristic of nematode endophthalmitis.

Case 2

A six-year-old boy had been noted for a period of at least six months to squint his right eye when concentrating. He had complained of a film over the right eye for two weeks. The child had had a pet dog since the age of 2½ years, which required deworming as a puppy. The child was in good general health.

On physical examination the child appeared well nourished, alert, and in no distress. Pertinent findings were limited to the eye.

Ocular examination: Visual acuity, counting fingers: O.D. 20/30, O. S., "E." Slit lamp examination showed a clear cornea and anterior chamber. The lens of the right eye had posterior capsular opacities; fundus examination under general anesthesia revealed dense vitreous condensation and fibrillar degeneration. In the superior nasal fundus, a worm-like vitreous mass and strands of condensation extended from two white, indistinct retinal areas surrounded by minute areas of chorioretinal pigmentation.

Laboratory data: The white blood cell count was 8,800 with 3% eosinophils. A serological test for *Toxocara canis* and a toxoplasmosis dye test were both negative. Chest and orbital x-rays were within normal limits. A stool examination was negative for parasites. Anti A and Anti B titers were less than 1:50.

Course: No improvement was noted on a trial course of systemic steroids. The vitreous and retina remained unchanged over a six-month period.

Comment: This patient, with decreased visual acuity and evidence of a chorioretinal lesion with overlying vitreous condensation, was presumed to have had contact with an

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infected puppy. The unchanging fundus findings indicated a stabilized chorioretinal inflammation presumed to be of a nematode origin.

Case 3

A seven-year-old white boy was noted, at age three, to have an exodeviation of the left eye. There was no history of playing with worm-infested animals. The possibility of a tumor was considered and enucleation advised. Further examination, with the child under anesthesia, showed some "scar" tissue considered to represent a parasite, and enucleation was postponed. The patient had subsequently been followed-up by several ophthalmologists.

The physical examination disclosed no abnormalities except in the left eye.

Ocular examination: Visual acuity was 20/20 O. D., <20/200 O. S.; refraction 0.00 (OU). External ocular findings were normal. Muscle balance—left exotropia sc 40-45. Fundus examination of the left eye disclosed a small horizontal retinal fold extending from the temporal disc through the macular area to an elevated, 1-2 disc diameter, circumscribed solid lesion located just posterior to the equator. This chorioretinal elevation was surrounded by an irregular ring of chorioretinal pigmentation and retinal traction folds. A chalk-white plaque was located on the surface of the mass. The peripheral retina was normal.

Case 4

This three-year-old boy had been noted to have an outward deviation of his left eye for approximately one month. A year before the parent's family had a pet dog treated for "worms" by a local veterinarian. Other dogs and cats were also family pets.

Physical examination disclosed a well nourished, robust child in no distress. Pertinent physical findings were limited to the left eye.

Ocular examination: Visual acuity was difficult to evaluate but appeared normal on the right and decreased on the left. External ocular findings were normal for both eyes. Muscle balance—an intermittent exotropia 20-30 at 20 feet sc. Ductions and versions were normal. The right fundus was normal. On examination of the left fundus the vitreous was clear. A solitary yellow white elevated mass, 2-3 disc diameter was located in the macular retina and choroid. A chalk-white plaque was seen on the smooth surface of this mass (Fig. 1). Traction folds and localized retinal detachment surrounded the lesion and extended to the disc. The retinal blood vessels radiated from the mass.

Laboratory data: The white blood cell count was 17,000 with 48% eosinophils. Total eosinophil count was 7,000. X-ray films of the chest and orbit were normal. Anti A and Anti B titers were less than 1:50. A stool examination was negative for ova and parasites. Hemagglutination test for *Toxocara* antigen yielded a positive titer of 1:160.

Course: Over a 12-month period the fundus lesion



Fig. 1. Case 4

remained unchanged except for a faint ring of chorioretinal pigmentation which developed at its base. Eosinophilia persisted.

Comment: These two similar cases are typical of the solitary focal retinal nematode granuloma. The fundus photograph resembles Ashton's and Unsworth's fundus drawing and photograph.^{8,10} The elevated round mass is best seen with the indirect binocular ophthalmoscope or slit lamp, with a Goldman fundus contact lens. The granuloma is located at the posterior pole adjacent to the optic disc and macula. Often a crescentic, slightly darkened area is seen within the granuloma, which indicates the nematode position. The white plaque on the surface was an unusual finding which has not been reported. Retinal traction folds or detachment may surround the tumor. The peripheral fundus appears normal.

Case 5

A four-year-old girl was seen because of reduced vision in the left eye and because "the sight looked white." The child had been playing with dogs near her home.

No physical abnormalities were found except for the eye.

Ocular examination: Visual acuity was 20/20 O. D. and 20/100 O. S. External ocular examination O. D.—normal; O. S.—a hypopyon filled the anterior chamber, obscuring the fundus.

Laboratory data: The white blood cell count was 6,000 with 19% eosinophils. Serological tests for *Toxo-*

cara were negative. No ova or parasites were found in the stool specimen.

Course: The patient was thought to have a nematode endophthalmitis. A trial of systemic antibiotics and steroids was given. Unfortunately she was lost to follow-up examination.

Comment: This patient presented an unusual sign of presumed nematode endophthalmitis—a hypopyon. The significant eosinophilia alerted the examiners to the possibility of this diagnosis.

Discussion

Ocular localization in nematode larva migrans due to *T. canis* is usually unrecognized in its early stages. A crossed eye, white pupil, or blurred vision may alert parents later to seek visual evaluation. The ophthalmologist may find chronic cyclitis, endophthalmitis, peripheral retinitis, or a quiescent chorioretinal mass.

Since the presumed diagnosis is a clinical one, a careful history and ocular examination are essential. The binocular indirect ophthalmoscope, combined with scleral depression, is the instrument of choice with which to examine the fundus from the optic disc to ora serrata. Examination with the patient under anesthesia may be required for a complete evaluation. Careful drawings are made for future reference. Periodic re-examinations should be carried out in all cases, to note progression or regression.

Nematode infestation is often misinterpreted as a retinoblastoma, the most common malignant childhood intraocular tumor. Differentiation is often impossible when the presenting condition is endophthalmitis. Careful pathological study of the enucleated eye may then provide the diagnosis of nematode invasion. The solitary nematode granuloma has certain clinical characteristics which help to separate it from other entities. The history of dirt-eating, contaminated pets, or visceral larva migrans may be helpful. Retinoblastoma, a hereditary dominant tumor, may be familial or sporadic. The granuloma is usually stationary, unilateral, and solitary, whereas the multicentric progressive retinoblastoma is frequently bilateral. Intraocular calcium, found in 75%

of retinoblastomas, is infrequent in nematode endophthalmitis.

Laboratory tests may be helpful but are not diagnostic. Every child with an ocular mass should have a complete blood count with a differential smear. Leukocytosis and eosinophilia are characteristic of the acute parasite nematode infestation, but may not be present at the time of the ocular manifestations. Unfortunately, sensitive and specific serological tests have not been developed for *T. canis*. This problem may be related to the lack of antibody during the chronic stages or of sensitive antigens. When positive in high titers, hemagglutination tests may support the diagnosis. Since the parasite fails to complete its life cycle, the stools are negative for ova and parasites.

Since treatment is nonspecific, prevention is important. Effective preventive measures have been outlined by Sprent and English.¹³ Embryonated eggs remain viable for years in soil. Adult dogs become infected by egg or larval ingestion. Female dogs should be examined for worms prior to mating or within the first three weeks of pregnancy. Active larvae migrate through the placenta, infecting the fetus. Newborn puppies may be excreting eggs and larvae when brought into a new owner's home. All new pets, therefore, should be de-wormed. Frequent microscopic re-examination of the stool and retreatment are still necessary after the pet has been initially de-wormed. Puppies should not be allowed inside the house until trained, especially where children are playing. The mother dog and puppies should be kept in an enclosure until the end of the suckling period, away from children who might become infected by ova adherent to their paws and coats.

Summary

The difficulty in the diagnosis and management of ocular localization in larva migrans is illustrated by representative cases. It is hoped that this parasitic infestation will be recognized as a serious, and not infrequent, complication of visceral larva migrans. All cases of recognized visceral

larva migrans should be re-evaluated and followed for ophthalmic complications. Retinal nematode granulomas may be differentiated clinically from retinoblastoma in some instances by a careful history and ocular examination. Whenever peripheral retinitis, chronic cyclitis, endophthalmitis, or solitary retinal lesions are found in children, ocular nematode infestation should be suspected.

Acknowledgement

The authors acknowledge the assistance of the Medical Illustration Department of the University of North Carolina in preparing the fundus photograph.

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A History of Davis Hospital

DAVID S. CALDWELL

With the removal, the latter part of this week, of the Davis Hospital from South Center Street to its handsome new building on West End Avenue, there is opened in Statesville a thoroughly equipped new hospital. Of the most approved design and construction and with scientific equipment in every department, the new hospital is one of the most modern and completely equipped institutions of this type in North Carolina.

"Statesville Has a New Hospital"

The Landmark

December 17, 1925

So begins the history of Davis Hospital, conceived in the boyhood dreams of Dr. James Wagner Davis, established January 10, 1923 and opening its doors to receive patients on December 18, 1925. In 1914, following his internship at Robert Packer Hospital in Sayre, Pennsylvania, Dr. Davis returned to Statesville to accept a position on the staff of Long's Hospital. (When the new county hospital was erected on the edge of town, this hospital was closed and taken over by the County Welfare Department,

for which purpose it is used today.) However, according to his biographer, LeGette Blythe, the young doctor was never completely satisfied there. The senior Dr. Long continued to perform the more complicated surgical procedures and Dr. Davis felt as though he were being denied the chance to develop his own skills. It is interesting to note that at Davis Hospital many years later, this same criticism was leveled at Dr. Davis by the younger surgeons on his staff.

Dr. Davis: Foreign Service and Political Philosophy

When the United States entered World War I in April, 1917, Dr. Davis was still on the staff of Long's Hospital. Already eager to establish his own hospital, he decided to enter the Medical Corps of the Army, and on Jan. 14, 1918 the young Statesville surgeon was ordered to active duty. During his military career he served with the American Expeditionary Forces in France and the United States Military Mission in Germany. In his later years Dr. Davis spoke often of the friends he had made in France and

Germany, and he frequently corresponded with them.

There was one phase of his military history that he never discussed in detail, nor did the Department of the Army choose to record it. It concerned a highly confidential mission to Russia with orders to confer with certain Russian leaders, most notably Lenin and Trotsky. In a letter written to Senator Arthur V. Watkins in defense of Senator Joseph McCarthy in Nov. 10, 1954, Dr. Davis referred cautiously to his mission in Russia. Excerpts from this letter appear in the text of Mr. Blythe's book, *James W. Davis—North Carolina Surgeon*.

I served my country in the First World War. Was overseas for a long time and spent about a year with the Russians in Germany and in Russia with the headquarters in Berlin . . . My duty there was as surgeon with a small group known as the American Military Mission and also other duties which were assigned me verbally by General Pershing and of which I cannot speak, but I can tell you that I was trusted with a mission and was the only one in this group who was assigned to this special mission which required risking my life and required the use of tact, courage, and every faculty I had in order to accomplish satisfactorily the task to which I was assigned and which, as I said, was a confidential one and which I was told, after I successfully completed this, that the President, Mr. Lansing and Col. House said they were sorry that it was impossible for them to give me adequate recognition for the service which I had rendered America in one of the most difficult and trying assignments that has ever been given an American officer in a foreign country among strange people, because it was so confidential that only verbal orders were issued about this and had I been lost or liquidated in the performance of this duty nothing would have been said about it.

The letter, however, neither explained the purpose of the mission nor disclosed its findings, but one can be sure that Dr. Davis's firsthand dealings with communism had a profound influence on his political policies just as the purpose of the letter indicated. His stand against socialism based on that mission led him to oppose, actively 30 years later, the Truman Administration's attempt to socialize medicine under the form of House Bill No. 5940. Senate Bill No. 1453, a similar measure, had already been

passed without any opposition. On October 12, 1949, Dr. Davis and Dr. L. B. Skeen of Mooresville, accompanied by six registered nurses and backed by Congressman Robert L. Doughton, of North Carolina, appeared before the House Rules Committee and presented their arguments against the bill. After the hearing the committee killed the bill, which within 24 hours would have been placed before the United States House of Representatives—with socialization of medicine, dentistry, and nursing, and the end of every three-year nursing school in the United States hanging in the balance.

The effect of this mission was also felt on the local level, in the principles upon which Davis Hospital was founded and operates today. Dr. Davis bitterly opposed anything that smacked of socialism—an opposition that seemed to underlie his philosophy. Independence and free enterprise became the two principles which guided him. Even today, Davis Hospital prides itself on being self-supporting, and has to date never accepted any local, state, or federal aid.

The Carpenter-Davis Hospital and School of Nursing

In 1919 after his discharge from the army, Dr. Davis returned to Statesville, only to discover that his position at Long's Hospital had been filled. He was, therefore, confronted with the challenge of building new hospital facilities or of moving on, possibly even to South America, to practice surgery. At that time in Statesville, the late Dr. F. A. Carpenter was active in eye, ear, nose and throat practice. He performed tonsillectomies and other procedures in his office, over what is now Holmes Drug Store.

In 1919 the custom was for one doctor to have one office of two or three rooms, one attendant, and a T-model Ford for making calls. Dr. Davis chose to change this by establishing a group arrangement with assistants, nurses, technicians, and associate doctors. As a result, on Jan. 1, 1920, Dr. Davis and Dr. Carpenter opened the Carpenter-Davis Hospital, a brick structure on South Center Street, now the Carolina Hotel. The arrangements made between the

two physicians regarding its establishment were not recorded.

In May of the same year the 35-bed hospital established the School of Nursing, with three young ladies in the freshman class. Miss Elizabeth Hill, a graduate of Mitchell College and the School of Nursing at Charlotte Sanatorium (today Charlotte Memorial Hospital), was the "entire nursing staff" when the hospital opened, and it was under her direction that the nursing school was organized. She is still with Davis Hospital as Superintendent of Nurses.

Today the School of Nursing has a capacity of 75 students in three classes. In its 49-year history the School has graduated more than 500 nurses, many of whom have remained in Northwest North Carolina, an area one third that of the whole state supplied by only four nursing schools. On May 23 of last year Miss Hill presented nursing pins to the 15 candidates in the class of 1969. Having first awarded pins to the three young ladies in the class of 1923, she marked her 47th graduation exercise last year.

A Dream Is Realized

In about the second year of operation Dr. Carpenter died, leaving the full burden on Dr. Davis. He continued to operate the Carpenter-Davis Hospital, but all the while made plans for his own institution. The site he chose was a cow pasture adjacent to and west of the Wagner homestead on West End Avenue, his grandmother's home. Though he grew up in the Goshen Community of Wilkes County, Dr. Davis was born in the old Wagner home in 1886, and had often played and hunted in the fields and pasture that were to become the lawn of a 250-bed hospital. In 1924 he acquired the title to the property, and after securing a loan from his uncle "Clint" Wagner to supplement what funds he had, he employed John Gilbert, a Statesville contractor, to begin construction of the plant.

Physical facilities

The steel and reinforced concrete, brick veneer structure was completed late in the fall of 1925 at a cost of \$80,000. According to a report in *The Landmark* that opening

day, the 50-bed unit included four stories and a basement, fireproof and soundproof. The first floor included a reception room, executive office, EENT department, examining rooms, clinical laboratories, a minor operating room, and an x-ray room. The latter was "complete in every detail," including a 10-inch x-ray machine with a transformer located in the basement, "to eliminate noise from the x-ray room." A radiographoscope invented by a North Carolina physician for viewing x-ray films stereoptically was one of the first to be placed in a hospital in North Carolina. The basement housed the furnace room, laundry, nurses' classroom, nurses' dining room, a large kitchen with modern equipment and a dishwasher, pantries, cold storage room, servants' dining room, and a diet kitchen connected by an electrical dumbwaiter with the diet kitchens on the second and third floors. Convenient innovations included linen and dust chutes.

On the second and third floors were the operating rooms and accommodations for 50 patients. Fourteen of the rooms had a connecting bath, and all were equipped with a new electrical silent-signal system which replaced the old call bell. The operating suites on the third floor included an obstetrics room, two fully-equipped operating rooms, and an adjoining sterilization room.

On the fourth floor were located a reception room and "cheerful sun parlors." A small bronze tablet on the door of this room recorded that it was furnished by a Mr. and Mrs. Floyd Holman of Wilkesboro in memory of their son, John Rufus, a veteran of the World War. Opening onto the fourth floor was a roof garden overlooking the city "and affording on clear days a magnificent view of the mountains in the distance."

Anyone who has visited Davis Hospital and chosen to use the stairs has no doubt noticed the oddly constructed stairway running from the basement to the top floor in the main building. It was designed by Mr. U. A. Ostwalt and was considered at the time a remarkable piece of engineering. Additional features included three radio-receiving stations which could be connected

with a loud-speaking circuit or a phonograph, an elevator connecting all floors, an intercommunicating telephone system, and drinking fountains on each floor.

Medical and nursing staff

The staff that opening day included three other physicians in addition to the chief of staff, Dr. Davis: Dr. V. K. Hart, EENT; Dr. C. R. Toy, house physician; and Dr. S. A. Rhyne, radiologist. Miss Hill had also come with Dr. Davis to the new facility as head surgical nurse and superintendent of the training school. There were 17 student nurses enrolled and they were housed in the Wagner home next door to the hospital, where Dr. Davis's mother then lived. Miss Mary Lee Yates, listed in 1925 as assistant nurse in the EENT department, later became assistant secretary and treasurer of the institution.

In 1930 Dr. Lloyd R. Shaw, a graduate of Wake Forest College and the Medical College of Virginia and an Iredell County native, joined the hospital as chief of the Department of Obstetrics, a position he holds today. It was also in 1930 that Dr. J. Sam Holbrook, a native of Wilkes County, spent his summer working in the laboratory of the 50-bed hospital, four years prior to joining the staff as a full-time physician in internal medicine.

Early Growth

From the opening day in 1925 the patient load of Davis Hospital began to grow. The hospital drew from Iredell and surrounding counties: Rowan, Mecklenberg, Yancey, Mitchell, and Avery. It soon became evident that more room would be needed, and in 1930 a new wing, the first of ten major additions to the original structure, was opened. It was an L-shaped structure added to the rear of the main building. It housed expanded dining and kitchen facilities, lounges, dressing rooms, and showers for Negro personnel in the basement. Above this were two floors with 40 beds, bringing the total capacity to 90.

During this period of rapid growth as his professional staff increased, Dr. Davis saw the need for housing near the hospital. As a result, the institution today owns con-

siderable property in the neighborhood, some of which houses the staff members.

In 1934, after two years of hospital training in Philadelphia and New Orleans, Dr. Holbrook joined the staff of four full-time physicians. During the next 15 years the need for additional facilities became progressively acute, and in 1949 construction was begun on the maternity wing, which opened the following year with Dr. Shaw in charge. It provided a new delivery room, labor rooms, a nursery, physicians' offices, a waiting room, and beds for 35 medical and the western end of the 1930 addition. In 1951 a third floor was added to the 1930 addition, adjoining the surgical facilities on the third floor of the main building. This made a total of four complete operating rooms—two in the original structure, one converted from the original delivery room, and the new one. This completely air-conditioned and modernly equipped facility was opened in 1952.

Further Additions

The largest and most significant addition to the main building was yet to come. Dr. Davis foresaw the day when Statesville and the surrounding area would need a complete diagnostic clinic to fill the needs of people of average means. It was his greatest ambition, but one which he would not live to see fulfilled. He designed the structure, awarded the contract, and watched its progress until his death just three months before its scheduled opening.

This was the East Wing or Diagnostic Clinic. Completed in September of 1955, it occupies the site of the old Wagner house, where Dr. Davis was born. The walk leading to the main entrance formerly led to Mrs. Wagner's front door.

As stated on the program for the Dedication Ceremony in September, 1955, the building included a full basement housing a records room, Physical Therapy Department, systoscopic room, orthopedic room with x-ray facilities which would also supplement the X-ray Department of the hospital, the isotope room, and the machine room containing air-conditioning equipment for the entire building. The first floor included a

reception room, doctors' offices, business offices, and examining rooms. The second and third floors contained 29 beds each, bringing the capacity of the hospital in 1955 to 200 beds.

A few months afterward, the x-ray equipment in the main building was moved to the new basement, utilizing the auxiliary equipment already there and the isotope room for radiological studies. Two years later, in the late 1950s, the kitchen and dining area were expanded southward and a Pediatrics Department of about 29 beds was built over it as a continuation of the first floor.

It was in the 1950s that the recovery room became a necessary part of the American hospital, and thus a part of Davis Hospital. In 1959 the Surgical Clinic was completed, providing a lobby, offices, and examining room on the ground floor; an expansion of the EENT Department, headed by Dr. J. R. Stewart, on the first floor; a Coronary Care Unit on the second floor; and the Recovery Room on the third floor. The Recovery Room contained space for eight patients, with oxygen and suction apparatus at every bed. That same year, the old emergency room was remodeled.

The latest addition to the Hospital is the Woman's Division. Up to 1963, Dr. Shaw and his house staff were using the ground floor of the obstetrical wing as office space. In order to provide additional facilities for obstetrics and gynecology and office area for another specialist in that field, the second largest expansion was begun and completed in 1963. Added to the western side of the existing structure, it brought the total bed capacity to 250. The first floor houses a lobby, examining and treatment rooms, dressing rooms, and doctors' offices. On the second floor are the delivery rooms, two private and one semi-private, making a total of four labor beds. There are also doctors' and nurses' lounges, and two nurseries containing 12 bassinets each. On the same floor is an isolation nursery and a formula room. The nursery is divided into three parts: one regular, one for premature infants, and

a third for sick infants (which is rarely used). The patient recovery rooms, including both private and semi-private facilities, are located on the third floor. Two of the ten examining rooms are now used for a clinical laboratory and cytology laboratory both staffed by technicians.

Construction is now under way on still another addition to the hospital. As far back as the early 1960s a new x-ray department was considered essential, but the Woman's Division took priority at the time and subsequently forced the postponement of new x-ray facilities. The new structure is located between the East Wing and the main building and will provide four diagnostic x-ray rooms with adjoining baths and waiting areas. It is close to the Emergency Room, which will make frequent use of its facilities.

Financial Policies

In a day of spiraling hospitalization costs, inflation, and cutbacks in federal and state subsidies, the future of the small private hospital is imperiled—not so for Davis Hospital. Throughout its 44 years, it has remained solvent and staunchly independent, managing to avoid any serious financial difficulties. The clinic and hospital are run almost entirely on patient fees, yet today the cost per day for the patient is only slightly above \$30. When asked how this was accomplished in an interview for a newspaper feature, Dr. Holbrook replied: "By hard work; we work a little harder, and we work for a little less . . . We cut out the dead wood in our operating costs . . . we achieve a high degree of efficiency in all we do." The hospital also saves money by running its own laundry, built in 1952.

The principles of private enterprise, individual initiative, and hard work which Dr. Davis believed in so wholeheartedly are the backbone of the hospital's operation today. The hospital has accepted only two grants, both from private foundations. Ford Foundation one year gave \$70,000 which was used in construction of the nurses' home and classrooms built in 1953 and expanded in 1956. At the time of this latter

expansion the Reynolds Foundation gave approximately \$34,000.

Even though the state refunds the hospital \$100 annually for each student enrolled, the cost of operating the School of Nursing is approximately \$75,000 per year. There was a time when the student nurses returned a great deal of this expense in their services, but in recent years they have not been permitted to render service to compensate for their keep and instruction. Without the School of Nursing, however, the administration fears they could never hope to have enough staff nurses to provide adequate care, owing to the widespread shortage of nursing personnel. Consequently the school must remain in operation to insure a perpetual nursing staff for this and other Northwest North Carolina hospitals.

Thus the entire hospital is forced to operate efficiently and effectively and to avoid oversophistication. The hospital does not buy every new product on the market, but purchases what it needs and what it can pay for. To date there has been no government money—county, state, or federal—in the program. Davis Hospital, however, holds a trump, the Wagner Foundation, valued at three quarters of a million dollars. As was previously mentioned, the original building was built by Dr. Davis with the support of his uncle, "Clint" Wagner, who throughout his lifetime took a great deal of pride in the service rendered by Davis Hospital. The late Mr. Wagner left his entire life's savings "to see that there was always a Davis Hospital to serve humanity." The Foundation is a bulwark or endowment to assure the hospital of continuous operation under severe conditions. It is not used for operating expenses under ordinary circumstances.

The hospital, until 1937, was privately owned by the late Dr. Davis. That year he gave it away to a nonprofit corporation. Each year thereafter he put back into the corporation all his earnings, and for a number of years he drew only a dollar annually from it. Prior to his death on May 31, 1955 he had secured Dr. Holbrook's commitment to continue the service and quality of Davis Hospital, Inc. As Dr. Holbrook says today, "This we have tried to do."

Present Operation

Paramedical education

Dr. Holbrook speaks of the operation of the hospital in three phases, the first being the schools of paramedical education. In addition to the School of Nursing, recognized by the National League of Nursing, there is a School of X-ray Technology; and, although no formal school exists for this purpose, the hospital has trained a large number of laboratory technicians through the years. Each spring Miss Hill has one graduate and one resident nurse to devote much of their time to the teaching and training of qualified women to become nurses' aides. This requires several weeks of study before they can be of service to the nurses on the floor.

Clinic and Outpatient Department

The second phase of operation is the Clinic and Outpatient Department. This department is subdivided into several specialties and subspecialties. The Medical Clinic is staffed by four internists—Dr. J. Sam Holbrook, Dr. E. R. Caldwell, Dr. George M. Ekgley, and Dr. N. Max Lewis, and two general practitioners: Dr. Ben C. Bowen and Dr. Ben E. Dunlap. Assisting these six physicians are five nurses and a number of aides and technicians. In the department is the electrocardiographic equipment and the heart station. The Surgical Clinic and the Emergency Room operate jointly with two surgeons, Dr. Paul L. Ogburn and Dr. Robert L. Dame, six nurses, a number of aides, and a receptionist. The Urological Clinic is staffed by a consultant, Dr. A. Paige Harris, with hours and days scheduled for outpatient visits. The Orthopedic Clinic, staffed by Dr. John A. Powers, a consultant, is held in the Physical Therapy Department, and serves inpatients, outpatients, and office referrals. Two pediatricians, Dr. Ralph L. Bentley and Dr. Margaret J. Willhide, two receptionists, and three nurses staff the Pediatrics Department. The EENT Clinic is staffed by one specialist, Dr. J. Reagan Stewart, three nurses trained in EENT, and a receptionist. They are equipped to handle both outpa-

tients and house cases for examination and treatment. The Obstetrics and Gynecology Clinic is housed in the Woman's Division and staffed by four specialists—Dr. L. R. Shaw, Dr. Edwin R. McCoy, Dr. Richard A. Boyd, and Dr. William H. Cherry. The Radiology Department is composed of two radiologists, Dr. R. L. Littleton and Dr. Robert L. Stevenson, and a number of technicians.

In the summer of 1930, when Dr. Holbrook first worked at Davis Hospital in the Clinical Pathology Laboratory, it consisted of one small room. In the expansion of that year two large rooms were added, and today seven technicians operate the facilities provided in these three rooms. In 1967 an additional laboratory with one technician was set up between the Pediatrics Department and the Woman's Division to handle their outpatient work, thus making it more convenient to the patients and giving more prompt results to the physicians. A screening laboratory staffed by one technician for cytological work is located on the same floor. Questionable smears are sent to the Department of Pathology of Bowman Gray School of Medicine, a service begun in 1930 when Dr. Coy C. Carpenter began handling the surgical pathology for the late Dr. Davis. Since that time Dr. Carpenter and his successors have continued to serve as consultants in surgical and clinical pathology. Dr. E. R. Caldwell who joined the staff in 1952, is the director of the Clinical Laboratory and supervises the laboratory personnel. Last year one of the pathology residents at Bowman Gray spent the greater part of a day each week at Davis Hospital in in consultation with technicians and staff members, a service of proven worth.

The latest addition is the Department of Inhalation Therapy under the direction of one internist and a registered nurse trained in this field and experienced in anesthesia. This nurse also supervises the administration of oxygen and other inhalants throughout the hospital, including such devices as croup tents.

Inpatient care

The third aspect of the hospital's operation is the hospital proper, in which there are currently 181 beds situated in private, semi-private, and ward rooms. (The hospital has a 250-bed capacity.) Most of these rooms have connecting baths. In the Pediatrics Department, glass partitions divide the wards into compartments, each with its own bath. One of the most useful features here is the inclusion of an adult's bed with the child's bed, so that the mother may stay with the child if necessary.

Of the general medical and surgical areas, one floor of approximately 24 beds is devoted largely to the care of elderly female patients. Another with 29 beds is used for surgical cases, and a similar area is devoted exclusively to medical patients. There is also a Coronary Care Unit having six private rooms with adjoining baths. These rooms have heart monitors mounted on the wall outside for ready observation by the attending nurse or physician.

Hospital Achievements

An advertisement written by Dr. Davis appeared in a Statesville paper describing some of the firsts that he and his hospital had been responsible for. Davis Hospital was the first hospital in North Carolina and one of the first in the United States to install air-conditioning systems in its operating rooms. It had had organized blood-donor services for many years, and also had a blood bank very early in its history. It was one of the first in the United States to use glucose intravenously.

The hospital is fully accredited by the Joint Commission on Accreditation of Hospitals and has a cancer program approved by the American College of Surgeons. As of Aug. 21, 1968, the hospital had complied with the Civil Rights Act and on the same date began accepting Medicare coverage for elderly and disabled patients. It is a voluntary, nonprofit, general, short-term hospital (more than 50% of the patients stay less than 30 days) directed by a board of trustees. This board is composed of a medical

director, a chairman, and an executive committee.

For the past several years there have been approximately 7,000 admissions annually, and in 1967 there were 462 births. The latter figures varies, however, according to trends in the national birth rate. The average number of outpatients receiving care each year is more than 80,000. In the 12-month period ending Sept. 30, 1966, the ratio of the average number of inpatients receiving care each day to the average number of beds maintained (the occupancy) was 64.6%. For the same period the total expense was \$1,639,000, with a payroll of \$1,098,000.

The number of personnel in the hospital, clinic and School of Nursing is about 350. Depending on the case load, there are 80 to 90 registered nurses on the staff. There are 17 full-time physicians with offices in the hospital, and a number of consultants and specialists who render their services when necessary. These physicians are salaried by the hospital, which is responsible for collecting all fees, including those for hospitalization and physicians' services.

Conclusion

The biography written by Mr. Blythe includes an undated memo written by Dr. Davis which defines the operation from his point of view:

This hospital is a permanent institution dedicated to the health and well-being of all the people who came here for treatment . . . It is the constant aim of Davis Hospital to keep abreast of the very latest developments in medicine, surgery, and all the different specialties, and to put these into

operation so that our patients may have the benefit of them at the earliest possible moment.

All of the doctors here devote their entire time and attention to the patients in the hospital. They do not have any outside practice and no outside interests and for this reason they are able to devote their entire time and attention to the patients who are here in Davis Hospital. Likewise, when necessary, every patient has available the services of every doctor on the staff.

Today, though construction has changed considerably the appearance of the 1925 brick building, the same principles that guided the hospital on Dec. 18 of that year are still in effect unchanged. At the entrance of the old structure a permanent sign reads: "Everyone who comes here can expect kind and courteous treatment." Those who have sought medical care at Davis Hospital are aware that it is still observed to the letter.

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FEBRUARY, 1970

THE MIDWINTER EXECUTIVE COUNCIL MEETING—1970

On a bright and pleasant day the Execu-
tive Council met in Pinehurst to take care
of 3½ months' work on the highly mixed
bag of duties which fall to its lot. The death
of Ninth District Councilor Dr. Paul Deaton
since the last Council meeting was noted by
a brief period of silence, as were the recent
deaths of AMA delegate Dr. Elias Faison
and of one of our oldest living past presi-
dents, Dr. Charles Strosnider of Goldsboro.
With that gesture of respect to the memory
of these men who worked so hard for the

profession in mind, the agenda was taken
up.

The financial status of the Society appears
sound, and the 1970 budget was reviewed
with only minor problems being noted. The
annual audit report, now in preliminary
form, was gone over to the satisfaction of
the Council, and reflects the close attention
of the Society's officers to every dollar that
goes through the books.

When the consulting firm of Rothrock,
Reynolds and Reynolds was retained to
review Society operations, part of the plan
was to have follow-up visits after the initial
extensive survey; the visits would provide a
measure of progress, or at least change. The
first of these visits has been made and the
Council reviewed the report. A personnel
committee will be formed as part of the Ad-
ministration Commission, to advise Mr. Hil-
liard in establishing policy in that area. The
Council authorized the President to dele-
gate to the Executive Vice-President (Mr.
Barnes) certain duties which are now as-
signed to the Executive Director in the By-
Laws, and can authorize such delegation. A
systems analyst, suggested originally as an
addition to the headquarters staff by the
consultants, was omitted from the 1970 bud-
get. The follow-up adviser agreed that a
full-time person is not needed in that job
at present, but he recommended that sys-
tems analysis continue. The Council will
review this recommendation again in the fall,
after the many changes which have been
made in headquarters operation have had
a chance to become established.

Dr. Rosecoe McMillan, chairman of the
Archives Committee, told the Council that
the history of the Society, the long-term
project which he has headed, is almost ready
for publication. The few remaining manu-
scripts he expects to have in his hand with-
in the next few weeks. Editors at Duke and
Carolina are working on the manuscript,
using funds already budgeted for the pur-
pose, and the University of North Carolina
Press is interested in publishing the work.
At present it seems that three bound volu-
mes will be needed to encompass this major
piece of writing, with the first volume,

edited by Dr. Wiley Forbus, ready for the press now. The Council authorized a solicitation of prepublication subscriptions from the membership of the Society and from libraries at the price of \$30 for the complete set of three volumes. It is hoped that 1300 to 1400 advance subscriptions can be obtained, and a press run of at least 1500 sets is planned.

A considerable period of discussion was devoted to physicians' assistants and to the promise and problems they hold for medicine. Since the program for training such workers at Duke has received national publicity and is the oldest of current programs in the country, this state is looked to for guidance in such matters as legal authorization for the planned functions of these people. There have been meetings on the subject, and another is planned for early February. No action was called for at this time, but the Council is keenly aware of the rapidly changing picture of education in allied health fields, and will continue to study the matter and keep the membership informed when the time comes for definitive action.

The Committee on Relative Value Study forwarded a tentative recommendation that the Society not adopt the 1969 California Relative Value Study, nor any other relative value scale, feeling that any such scale was tantamount to a fee schedule, since any agency so desiring could assign a dollar value to various procedures by using the scale. They did recommend using the new California nomenclature for procedures and going to a five-digit code from the present four-digit code, as recommended by the California group. In regard to the code change, the Council was told that national insurance company representatives acknowledged a need for the change, but opposed it because it will cost them \$14 million in computer charges to make the change. The Council felt that further study of this matter is needed and referred the matter back to the committee.

Dr. John McCain presented a recommendation by the Committee on Medical Aspects

of Sports that we adopt a statement of policy issued by that group, with the intent of notifying all interested parties in the state that the Medical Society has a well-founded wish to be of service in sports medicine and is organized to furnish such help. The statement will be reworded in some passages and disseminated appropriately.

Dr. Cecil G. Sheps told the Council about the work of the Health Services Research Center at Chapel Hill, which he directs. When Dr. George Paschal was MSSNC president he called for an organization, based at Chapel Hill, to devote itself to research in the health care field; his was an early recommendation for such action. Later the federal government decided that centers like the one now at Chapel Hill were needed, and one of the first grants made was to establish the North Carolina organization. Dr. Sheps, who had spent some years at Chapel Hill previously, returned to the state to organize the program. His people are working with a group of physicians in Tarboro on such things as record keeping, use of new types of health personnel, and extension of pediatric private practice to a community child health program. Together with the Regional Medical Program, the HSRC is working toward the development of a neighborhood health center in Durham as a pilot project. An experimental dental program, emphasizing the use of auxiliary dental workers, is being tried. Surveys are being done to see why hospitals and health departments accept or reject new ideas; to see if the extended care facilities of the state work as intended; and to determine the factors involved in patient satisfaction with professional and technical people, with humane aspects of health care, and with the cost and convenience of getting health care. The Center has been asked by the Bowman Gray School of Medicine to set up an evaluation program which can be applied, after graduation, to the physicians' assistants now being trained at that school. The Center has a special interest in developing field projects which build a bridge between the university and the com-

munity situation through uniting theory with practice.

The Council made nominations and appointments for various awards and committees. Of immediate interest are the appointments of Dr. J. Henry Cutchin, Jr. as Vice Councilor of the Ninth District to fill the vacancy left when Dr. Thomas Fritz assumed duties as Councilor of that district for the remainder of Dr. Deaton's term, and of Dr. Roy Bigham to fill Dr. Deaton's place on the Board of Directors of North Carolina Blue Cross-Blue Shield.

Among the miscellaneous actions of the Council was approval of a recommendation by the Drug Abuse Committee that the Governor call a conference to discuss drug abuse in this state, to be supported by publicity through the Society's publications. Also approved was the Medical Education Committee's recommendation that the Regional Medical Program hire a coordinator of medical education from their funds. This position, which was previously discussed before the Council, provides a person to oversee all programs in the state designed for the continuing education of practitioners. Approval was given to a resolution from the Nursing Committee asking interested parties to do all they can to improve the opportunities of people in the paramedical fields to upgrade their jobs within their own fields, or to switch from one field to another—for example, from nursing to medical technology—without complete loss of educational credits gained in the initial field.

By the end of the day Council members felt that the Society had ample work to justify its existence, and looked forward to doing their home work in preparation for the next Council meeting before the Annual Meeting, May 16-20, in Pinehurst.

* * *

ENDOMETRIOSIS

Dr. Sutton's paper in this issue deals with an instance in which spillage of menstrual endometrium into the peritoneal cavity seems quite definitely associated with endometriosis. Patients like his, and experimental work of recent years, have confirmed

Sampson's idea of 40 years ago that escape of menstrual material into the abdominal cavity was a cause of endometriosis. That it may not be the only cause is suggested by the occurrence of endometrial tissue in such unusual places as the pleura, lung, arm, umbilicus, and lymph nodes, especially the first three. To explain them one may call on the second theory mentioned by Dr. Sutton, development through metaplasia (or differentiation) of tissues already present in the area of endometriosis, although recent work favors a modification of Sampson's ideas as the sole cause of the disease.¹

The late Joe V. Meigs^{2,3} of Boston wrote on several occasions of his idea that much endometriosis was associated with postponement of childbearing, which would result in long years of continuous menstrual cycling and presumably stimulation of tissues which might form endometrium in places where endometrium could only be harmful. It would also provide more opportunities for retrograde menstruation. He based his impressions on the marked disparity between private patients and ward patients in the incidence of endometriosis, as he saw it at the Massachusetts General Hospital (which is amply confirmed elsewhere). There was a parallel difference in the number of children between the two groups, and Meigs noted that endometriosis is almost entirely a disease of those over age 26. Personal observations in Thailand and discussion with gynecologic pathologists and gynecologists there supported Meigs' view, for they see endometriosis almost exclusively in women who have delayed marriage and childbearing while studying for a career, either at home or abroad. Women from the same social stratum who followed the conventional course of earlier marriage and immediate childbearing did not have the disease.

One wonders whether oral contraception will affect the incidence of endometriosis one way or the other. If it at least is not associated with an increased incidence there will be no reason for complaint, since endometriosis is an uncommon disorder even among women who postpone childbearing.

If it seems that all methods of contraception are associated with increased endometriosis, it may be necessary to take Meigs' suggestion that parents help finance early child-bearing by their children, with contraception to be practiced after children are borne (no more than two, our population control people would urge). That might not suit prospective grandparents too well, as it

didn't one of Meigs' friends, who said he would call on him for financial assistance if his eight children took Meigs' advice.

References

1. Scott RB: External endometriosis. *Postgrad Med* 39: 295-303, 1966.
2. Meigs JV: Endometriosis. *Ann Surg* 127:795-809, 1948.
3. Meigs JV: The medical treatment of endometriosis and the significance of endometriosis. *Surg Gynec Obstet* 89:317-321, 1949.

Committees & Organizations

PROBLEMS FACING COUNTY MEDICAL SOCIETIES

*Remarks of the President of Guilford
County Medical Society on
Relinquishing Office*

SHERWOOD W. BAREFOOT, M.D.*

I am grateful for the honor of having served as president of the Guilford County Medical Society during the past year. I accepted this office with deep humility. I considered my election to this office the highest honor that my colleagues and associates could bestow upon me.

I began the year with four objectives:

1. To complete the job of revising and updating our Constitution and By-Laws which had been initiated by my predecessor, Dr. Wayne Benton. This has been accomplished, and I shall be eternally grateful to the *ad hoc* Committee—of which E. D. Apple, M.D. and John L. Brockman, M.D. were co-chairmen. They did an excellent job in bringing to completion this arduous chore.

2. To endeavor to stimulate more interest and a greater involvement by the members in the operation of the Society.

3. To try to improve our public relations and create a better image of the profession in the eyes of the public.

4. To try to create greater unity and a better understanding between the physicians of High Point and Greensboro.

The future is a record of the past. As always, time will tell what—if any—progress was made in the last three objectives.

Some members have been and continue to be critical of this Society. I believe that each of us should be critical, but at the same time, try to do something about the things we criticize. The Guilford County Medical Society, like any other organization, will not make progress unless its membership sees to it that it does.

As varied and numerous as our problems are, I believe that the main one facing us today is the delivery of health care. Despite the fancies of certain despotic labor leaders and paranoid HEW Administrators regarding their capabilities in health planning, most people will agree that the physician—by his education, training, experience, and perspective—is the person best qualified to plan for health care needs. I believe that both the legislative and executive branches of our federal government are well aware of this fact and are perfectly willing to delegate the greater part of the task to the medical profession, provided the profession displays a responsible willingness to assume the obligation for such planning. If we, as physicians, do not assume this obligation, someone will do it for us.

A significant portion of our present dilemma is due to the fact that we, as a profession, did very little in the past in presenting plans for health care. Our main efforts were directed towards opposing all plans that were presented. We must remember that, in the final analysis, it is not the physicians, members of Congress, nor any combination of administrators that will determine how medicine will be practiced in the future. Public opinion alone will determine this future course, inasmuch as it is the public which casts the votes that put men

Presented in a revised form at the December 4, 1969 Meeting of the Guilford County Medical Society, Sedgewick Manor, Greensboro, North Carolina.

*1030 Professional Village, Greensboro, N. C. 27401.

in public office—men who will make laws and policies of the future. Each of us, as a physician, can and should influence that sphere of public opinion formed by those who are touched by our professional activities and daily lives. Each of us should use whatever talents we possess. Many will feel that what they can contribute is so small that it is not worth the effort. I share their feelings about many things; but I am encouraged to try a little harder when I remember that the woods about us would be very silent if no birds sang except the best.

In the years ahead we shall need a unified voice to speak for the profession. As I see it, the logical place to begin is for each of us to strive to develop and maintain a strong local society. We may expect strong opposition, in the future, against many of the things about which we have deep convictions, but I would remind you that few people seldom want to walk over you unless you lie down.

15-Minute Film Describes

New Method of Prostatectomy

A new surgical technique used successfully in over 250 patients with benign prostatic hypertrophy is demonstrated in a film originally presented at the recently-concluded 118th annual American Medical Association meeting in New York City.

Titled "Modified Retropubic Prostatectomy," the 15-minute color film describes the technique devised by Dr. A. H. Kleiman, New York City. It was produced under Dr. Kleiman's supervision by means of a grant from Winthrop Laboratories.

Illustrations of the complete technique are shown prior to filming an actual operation. A highlight of Dr. Kleiman's new method is a suprapubic crucial incision. Other features shown in close-ups are use of a three-bladed miniature prostatic retractor; a square pattern of hemostatic traction sutures for elevation of the prostatic capsule; and special revision of the bladder neck.

Hypaque urography was routinely employed preoperatively. Vasectomy was omitted in 95% of the procedures. The film emphasizes the importance of antimicrobial agents such as NegGram for the prevention of complications.

In the 250 patients reported on by Dr. Kleiman, the new technique was credited with shortening the course of postoperative hospital stay and reducing the incidence of such complications as incontinence, impotence, epididymitis, and stricture formation.

Bulletin Board

COMING MEETINGS

Greensboro Academy of Medicine, 23rd Annual Medical Symposium—Greensboro, March 26.

North Carolina Diabetes Association, Third Annual Scientific Symposium—Bowman Gray School of Medicine of Wake Forest University, Winston-Salem, April 3.

Fifth Annual Wilson Memorial Hospital Symposium: "Recent Advances in the Diagnosis and Management of Cancer" (acceptable for 7 accredited hours by the AAGP)—Wilson Memorial Hospital, Wilson, April 9.

Southeastern Surgical Conference, 38th Annual Assembly—Marriott Motor Hotel, Atlanta, Georgia, April 20-23.

NEW MEMBERS OF THE STATE SOCIETY

Charner Williams Bramlett, M.D., 435 E. Statesville Ave., Mooresville 27560

Thomas Jefferson Mearns, M.D., GP, Claremont Medical Clinic, Claremont 28610

Robert Stanley Mandel, M.D., S, 815 Churchill Drive, Chapel Hill 27514

Horton Gray Jolly, M.D., ANES, 14-C Stratford Hill Apts., Chapel Hill 27514

Lloyd Stanley Anderson, M.D., NS, N. C. Memorial Hospital, Chapel Hill 27514

Herbert Jennings Procter, M.D., S, Dept. Surgery UNC, Chapel Hill 27514

Winfred Lindley Sugg, M.D., S, 500 Laurel Hill Rd., Chapel Hill 27514

Robert William McConnell, M.D., R, 1711 W. 6th St., Greenville 27834

Kenneth Lee Cloninger, Jr., M.D., 210 W. Wendover Ave., Greensboro 27401

Herbert Marvin Baker, M.D., 5701 Buddingwood Dr., Greensboro 27409

Kenneth Arnold Gill, Jr., M.D., 1313 Westminster Dr., High Point 27262

Philip Diefenderfer Zulick, GP, Bat Cave, N. C. 28710

James Gibbs, M.D., 820 Fleming St., Hendersonville 28739

Fergus Bailey Pope, M.D., Pd, Celo Farm, Route No. 5, Burnsville, N. C.

Lewis Newman Terry, Jr., M.D., 3712 St. Mark's Rd., Durham 27707

Donald R. Coffman, 118 Marshal St., Warrenton, N. C. 27589

Wilbur James Steininger, M.D., N. C. Sanatorium, McCain, N. C. 28361

UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE TV SERIES

A series of one-hour television programs entitled "Focus on Medicine" is being presented by the UNC School of Medicine through a North Carolina Regional Medical Program grant. Broadcast times are 9 to 9 a.m. and 10 to 11 p.m., Thursdays, on these Univer-

sity of North Carolina TV Network stations: WUNC-TV, Channel 4, Chapel Hill; WUND, Channel 2, Columbia; WUNE-TV, Channel 17, Linville; WUNF, Channel 33, Asheville; and WUNG-TV, Channel 53, Concord.

The series began on Feb. 12 and will continue for a total of 16 weeks.

Dr. Edgar T. Beddingfield, State Medical Society President, introduced the series. The first program dealt with "Chronic Obstructive Pulmonary Disease," and featured UNC faculty members from the Division of Pulmonary Medicine of the Department of Medicine.

Three other programs in the series will be wholly locally produced, featuring UNC faculty. Titles are "Management of Chronic Renal Insufficiency," with Dr. Louis G. Welt, chairman, Department of Medicine; "Problems in CNS Trauma," with Dr. Robert Timmons, associate professor of medicine (neurology), and Dr. William Radcliffe, assistant professor of radiology; and "Current Status of Abortion," with Dr. Charles Hendricks, chairman, Department of Obstetrics and Gynecology, et al.

Twelve additional programs will be presented by medical educators from the UCLA School of Medicine, New York Academy of Medicine, Medical University of South Carolina, and other institutions. Subject areas include pulmonary, coronary heart, and gastrointestinal diseases; pediatrics; and social issues of concern to physicians. When time permits, local practicing physicians and UNC faculty will discuss their reaction to the presentation.

For more information, address Continuation Education, UNC School of Medicine, Chapel Hill, N. C. 27514.

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

A group of Duke University faculty members, joined by two scientists from other research centers, have written one of the most comprehensive studies of the aging process yet in print.

Entitled "Behavior and Adaptation in Late Life," the book is written not only for professionals investigating aging but also for the general reader interested in the problems of growing old.

Co-editors of the book are Dr. Ewald W. Busse, chairman of Duke's Department of Psychiatry and director of the Duke Center for the Study on Aging and Human Development, and Dr. Eric Pfeiffer, associate professor of psychiatry at Duke. The book, just off the press, was published by Little, Brown and Co.

In their preface, the doctors said they attempted "to bring together basic information which has a bearing on how people adapt to growing old. They called their book "an integration of diverse contributions."

"We feel that no single discipline, whether it be psychiatry, sociology, biology, or economics, can claim to offer a comprehensive explanation of how aged people act, think, and feel, or what the multiple determinants of their behavior are."

Busse contributed a chapter on "Theories of Aging," and Pfeiffer wrote "Sexual Behavior in Old Age." Jointly they contributed "Functional Psychiatric Disorders in Old Age."

Other chapters deal with a broad range of subjects including "Sociological Aspects of Aging," "Economics of Retirement," "The Ambiguity of Retirement," "Health Experience in the Elderly," "Living Arrangements and Housing for Old People," "How the Old Face Death," "Intellectual and Cognitive Changes in the Aged," "The Brain and Time," "Organic Brain Syndromes," "Institutional Care of the Aged," "Nursing of Older People," "Social Casework and Community Services," "Training in Geropsychiatry," and "The Aged and Public Policy."

Most of the contributors are Duke faculty members, representing the fields of medicine, psychiatry, sociology, economics, biology and nursing. Two chapters, "Living Arrangements and Housing of Old People" and "Institutional Care of the Aged," were written respectively by Dr. Ethel Shanas, professor of sociology at the University of Chicago, and Dr. Alvin Goldfarb, an associate clinical professor of psychiatry at Mt. Sinai Medical School in New York.

* * *

Modern man is fast becoming a victim of his own technology, through which he is destroying the very environment where he lives the good life.

To help divert man from this reckless path, Duke University Medical Center has initiated a research training program in its newly established division of environmental medicine.

Designed for third and fourth-year medical students, the program began in October. It provides students who will work with environmental problems a basic background in biochemistry, anatomy, pathology, and physiology.

The new interdepartmental program was proposed by a committee headed by Dr. Kaye H. Kilburn, associate professor of medicine and director of the Division of Environmental Medicine of the Department of Medicine.

The program, developed for physicians in advanced training, is being extended to orient the medical students toward aspects of maintaining good health and healthful surroundings in addition to the treatment of disease.

* * *

High levels of pesticides appear to be hurrying several species of animals toward extinction.

"The pollution death of Lake Erie causes it to no longer be viewed as fresh water and the ecology of Lake Michigan is being drastically changed.

"More frightening to contemplate are the effects of herbicides, pesticides and petroleum on the marine plants, especially plankton of the Pacific Ocean. Here the oxygen supply for North America is generated. At present the consumption of fuel in the U. S. requires more oxygen than plants on the land surface generate each day," Kilburn noted.

The health effects of polluted water on humans

who drink it range from immediate intestinal reactions and infections to delayed effects resulting from absorption of fertilizer, phosphates, nitrates and other metals, Kilburn said.

Air pollution has been correlated with the failure of children's breathing capacity to increase as they grow older.

"Effective legislation to control air pollution requires biomedical information about the health hazards wrought by poisoning our atmosphere. The Duke program provides a means of teaching physicians and medical students to obtain that data," Kilburn said.

Durham and North Carolina's Research Triangle are the national headquarters of the Air Pollution Control Administration with which the division of environmental medicine is already working.

Dr. Anthony R. Dowell, assistant professor of medicine, and Kilburn are already studying the early changes in lung cells, membranes and surfaces that are produced by noxious gases from automobile exhausts.

Occupational hazards represent specific exposure problems for a population of workers in addition to the problems of their non-working environment.

It is imperative that data be gathered to determine occupational hazards to workers exposed to certain materials, Kilburn said.

For example, a study of byssinosis among workers in the cotton textile industry is under way. This study also will provide field experience for medical students and postgraduate physicians in assembling the biomedical weapons to combat this problem. The investigation includes the measurement of dust levels, the identification of individuals who react to dust, the mechanism of the reaction and the relation to chronic bronchitis and other diseases leading to disability.

The division of environmental medicine, which began the byssinosis study in North Carolina recently, plans to study other industrial problems such as the exposure to plastic polymers, brick dust, dyes, metal alloys, asbestos and conditions in paper mills.

These studies will be carried out in cooperation with the division of occupational health of the North Carolina State Department of Health.

Five postdoctoral physicians will be engaged in projects in environmental medicine beginning in July of 1970. At present three are in the program.

Duke, Kilburn believes, is in an advantageous position because of its close working relationship with the National Institute of Environmental Health Sciences, located in nearby Research Triangle Park.

* * *

The Duke University Medical Center Library has acquired its 100,000th volume and has started on its second hundred-thousand.

A 1794 publication, "An Oration on the Improvement of Medicine" by Amasa Dingley, was sent by the National Library of Medicine in Bethesda, Md., to become the Duke library's 100,000th book. Dr. Martin E. Cummings, director of the National Library and a 1944 Duke medical graduate, presented the gift re-

cently when he was in Durham to give the annual Trent Lecture in the History of Medicine at Duke.

Little is known of Dingley, except that he died during the yellow fever epidemic of 1798, along with 15 other New York physicians. This copy of his work brings to 560 the number of books printed before 1821 in the library's 12,000-volume historical collection.

The 101,001st book is an even rarer early medical work, the "Oratio" of Jean Francois Coste. It is a transcript of a speech given by Coste when he received an honorary doctorate from William and Mary College in Virginia in 1782.

The "Oratio," published in Leyden, the Netherlands, in 1783, concerns the medicine of the old world as it should be adapted to the new.

The work was the gift of Dr. Jack McGovern of Houston, Tex., a 1945 Duke School of Medicine graduate who recently completed a year as president of the Duke Medical Alumni Association.

* * *

The elderly lady smiled and nodded approvingly as the doctor completed his examination.

"I've lived 81 years," she remarked, "and I've had a lot of illness, but this is the first time they've ever brought the hospital to me."

The reaction of Miss Margaret Smith of Durham is typical of the response that greets the team operating Duke University Medical Center's mobile unit.

The unit, which can be described as a portable hospital laboratory, is a panel truck outfitted with sophisticated electronic equipment that visits homes of people involved in Duke's long-term study of the aged.

In 1954 the Center for the Study of Aging and Human Development at Duke began a program involving 260 community volunteers over 60 years old. Participants came to Duke for a comprehensive psychological, psychiatric, and medical evaluation.

The intent was to obtain health data on the 260 volunteers, compare the data with similar information gathered later, and analyze the results to determine the effects of aging and see how they varied among the individuals.

Dr. John B. Nowlin, assistant professor in the department of Community Health Sciences at Duke, is in charge of the mobile unit. He is assisted by Dr. Shirley Hastings, research fellow in the aging program.

Each person visited receives a physical examination. Blood samples are taken and an electrocardiogram and electroencephalogram also are given. The entire process requires about two hours.

The examinations are conducted on a continuing basis. The data assimilated by the mobile unit's crew are fed into a computer and correlated with similar information gathered on the volunteers at the outset of the program.

After the information is analyzed, doctors write a patient summary and send it to the personal physician of each volunteer, noting any health irregularity that should be examined.

Nowlin said the EKGs serve as reflectors of heart

disease and by comparing them with EKGs taken earlier, changes in heart performances can easily be spotted. Similarly, the EEGs give an overall idea of how the brain functions in the elderly.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

New educational facilities for the Bowman Gray School of Medicine and North Carolina Baptist Hospital will be dedicated Saturday, March 21.

The buildings, constructed in the first phase of a \$30-million expansion of the medical center, include a major addition to the medical school, a 400-seat auditorium and a classroom building for nursing and other allied health programs.

Dr. John A. D. Cooper, president of the Association of American Medical Colleges, will deliver the dedicatory address. His topic will concern the development of sufficient manpower to meet the health needs of the nation.

The buildings, which were opened for use last fall, made possible the addition of 20 medical students to the first-year class and the development of programs to train new categories of health workers, including assistants to the physician.

The auditorium will be named in memory of Charles H. Babcock, a Winston-Salem philanthropist who was instrumental in the relocation of Wake Forest University in Winston-Salem. The medical school addition will be known as the Hanes Building, honoring a family which has had an important role in the growth of the textile industry in North Carolina and which has encouraged and supported the advancement of the medical school and hospital.

Two surgeons and an anatomist recently received appointments to the faculty of the Bowman Gray School of Medicine. They are Dr. Ernest A. Austin, assistant professor of surgery; Dr. David M. Biddulph, assistant professor of anatomy; and Dr. Paul Marshall James, assistant professor of surgery.

Dr. Austin will serve as full-time chief of the surgery teaching service at Kate Bitting Reynolds Memorial Hospital, a community hospital with which the Bowman Gray School of Medicine began a cooperative program in 1968.

Since 1966 he has been chief of surgery at Fordham Hospital, Bronx, N. Y. He also was clinical instructor at the State University of New York, Downstate Medical Center.

Dr. Austin holds the B.S. degree from St. John's University and the M.D. degree from Howard University. He completed postdoctoral trainings at Kings County Hospital and the Veterans Administration Hospital in Brooklyn, N. Y.

Dr. Biddulph recently completed postdoctoral research fellowship training at the University of North Carolina School of Medicine. He holds the B.S. degree from Utah State University and the M.S. and Ph.D.

degrees from the University of Illinois School of Medicine.

Dr. James for the past two years was assistant professor of surgery at Hahnemann Medical College. Earlier he was chief of the Department of Human Studies, Division of Surgery, Walter Reed Army Institute of Research.

He received the A.B. degree from Swarthmore College and the M.D. degree from Hahnemann Medical College where he was elected to Alpha Omega Alpha. He interned at Philadelphia General Hospital and completed surgical residency training at Hahnemann Hospital.

Two years ago he was listed in "Outstanding Young Men of America."

* * *

The first radiopharmacy department in North Carolina is being developed at the Bowman Gray School of Medicine and North Carolina Baptist Hospital.

Operating as a part of the nuclear medicine section of the medical center's Department of Radiology, the unit is one of only 10 radiopharmacy departments at medical centers in the United States. It is involved in the handling and preparation of radioactive compounds used in medical diagnosis, therapy, and research.

Thomas R. Gnau, who received the master's degree in pharmacy from the University of North Carolina at Chapel Hill in 1960, has been appointed director of the new unit.

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Dr. Frank C. Greiss, Jr., associate professor of obstetrics and gynecology, was moderator of the Symposium on Obstetric Anesthesia at the annual Obstetrics-Gynecology Postgraduate Program at the University of Kansas. He presented the third Perinatal Lectureship on "Uterine Blood Flow Changes During Early Ovine Pregnancy" at the University of Colorado Medical Center.

Dr. Greiss also has been elected secretary of the Section on Obstetrics of the Southern Medical Association.

* * *

Two assistant professors of radiology at the Bowman Gray School of Medicine received the Certificate of Merit for their presentation at the meeting of the Radiological Society of North America in Chicago. Their exhibit was on "Learning Resources in Nuclear Medicine."

* * *

Dr. Courtland H. Daves Jr., professor of neurosurgery, has been reelected vice chairman of the North Carolina Council on Mental Retardation. His selection was made at the annual meeting of the council in Raleigh.

* * *

Dr. Felda Hightower, professor of neurosurgery, has been reelected to a five-year term as treasurer of the Southern Surgical Association. He was chosen at the annual meeting in Hot Springs, Va.

John F. Watlington Jr., chairman of the board of

Wachovia Corporation and president of Wachovia Bank and Trust Co., N.A., has been elected chairman of the Board of Visitors of the Bowman Gray School of Medicine. He succeeded Albert L. Butler, Jr., who had been chairman of the board since 1961. Watlington has served on the board since 1963.

GREENSBORO ACADEMY OF MEDICINE

The Greensboro Academy of Medicine will hold its Twenty-third Annual Medical Symposium on Thursday, March 26. A list of speakers and subjects to be presented follows.

David M. Hume, M.D., Chairman, Department of Surgery, Medical College of Virginia—"The Current Status of Renal Homotransplantation."

Franz J. Ingelfinger, M.D., Editor, New England Journal of Medicine—"Dietotherapy of Gastrointestinal Disease Reanalyzed".

Alexander J. Schaffer, M.D., Professor of Pediatrics, Johns Hopkins School of Medicine—"Community Medicine."

Joseph K. Perloff, M.D., Associate Professor of Medicine, Georgetown University School of Medicine—"Highlights in the Clinical Recognition of Congenital Heart Disease."

Beverly T. Mead, M.D., Chairman, Department of Psychiatry, Creighton University School of Medicine—"Misbehavior of Adolescents."

Robert B. Greenblatt, M.D., Chairman, Department of Endocrinology, Medical College of Georgia,—Subject to be selected.

For further information address Charles M. Hassell, M.D., Department of Pathology, Moses H. Cone Memorial Hospital, P. O. Box 13227, Greensboro, N. C. 27405.

NORTH CAROLINA DIABETES ASSOCIATION

The Third Annual Scientific Symposium of the North Carolina Diabetes Association will be presented in the auditorium of the Bowman Gray School of Medicine in Winston-Salem (Cloverdale exit, I-40) on Friday afternoon, April 3. The following program has been announced.

P.M.

2:30-3:15 The Sorbitol Pathway and Diabetic Complications—Dr. Kenneth H. Gabbay, Boston

3:15-4:00 Proinsulin—Dr. John A. Galloway, Indianapolis

4:00-5:15 Break

4:15-4:45 Diabetic Ketoacidosis—Dr. George F. Schmit, Miami

4:45-5:30 Diabetic Retinopathy: Promising Advances in Treatment—Dr. Robert F. Bradey, Boston

5:30-6:00 Panel Discussion: Complications of Diabetes—Dr. Ernest H. Yount, moderator

Demonstration of Laser—Dr. John A. Stanley, Winston-Salem

Panelists—Drs. Gabbay, Galloway, Schmitt, Bradley and Stanley

7:30 Annual meeting and banquet, North Carolina Diabetes Association, Sheraton Motel, Knollwood exit, I-40

Address: Programs for Diabetes at the Community Level—Dr. Luther W. Kelly, Jr., Charlotte

NORTH CAROLINA CHAPTER AMERICAN RADIOLOGICAL SOCIETY

Officers elected at the meeting of the North Carolina Radiological Society held last fall are as follows:

President, Dr. Richard G. Lester; president-elect, Dr. Ernest Spangler; vice president, Dr. William Bell; secretary-treasurer, Dr. James F. Martin; counselor, Dr. Charles Bream; alternate, Dr. Dorn Pittman.

SOUTHERN MEDICAL ASSOCIATION

The following North Carolina physicians and surgeons have been elected to section offices in the Southern Medical Association:

Dr. William T. Berkely, Charlotte, chairman, Section on Plastic and Reconstructive Surgery; Dr. John P. Tindall, Durham, secretary, Section on Dermatology; Dr. William J. Reid, Greensboro, chairman-elect, Section on General Practice; Dr. William P. Wilson, Durham, chairman, Section on Neurology and Psychiatry; Dr. Frank C. Greiss, Jr., Winston-Salem, secretary, Section on Obstetrics; and Dr. F. Wayne Lee, Charlotte, chairman, Section on Orthopedic and Traumatic Surgery.

These officers will share the responsibility for arranging the programs for their respective sections for the 64th Annual Meeting of the Association, which will be held in Dallas, Texas, Nov. 16-19, 1970.

NORTH CAROLINA BLUE CROSS AND BLUE SHIELD, INC.

North Carolina Blue Cross and Blue Shield, Inc., has announced plans to construct a new home office building on the Durham-Chapel Hill Boulevard, U.S. 15-501. President John Alexander McMahon said the building will have between 150,000 and 200,000 square feet of floor space and will represent an investment of around \$5 million.

The site is a 38-acre tract owned by the Corporation, midway between Chapel Hill and Durham in Orange County, just across the Durham County line. The property has a frontage of 1476 feet on the Boulevard, extending 1300 feet to the old Chapel Hill-Durham Road, where it has a 1646 foot frontage.

The new structure will replace four of the six buildings which now serve as a home office complex for the organization in the Durham-Chapel Hill area, McMahon said.

All six of the present Blue Cross and Blue Shield home offices are being fully utilized at the present time; and before the new building can be built several

additional locations may be required to house operations, McMahon said. The Corporation will begin fiscal administration of the new Medicaid program for medical indigents starting Jan. 1.

The Corporation will continue to use its present Durham home office building at 800 South Duke Street as a Government operations center for Medicare, Medicaid, and other State and Federal health programs administered by Blue Cross and Blue Shield, McMahon revealed.

The Chapel Hill home office building at 440 West Franklin Street and a building located at 410 West Geer Street in Durham will be sold, according to present plans.

Rogers C. Wade, senior vice president, who will serve as coordinator for the building program, said the Corporation had signed a contract with A. G. Odell, Jr., and Associates of Charlotte to provide complete architectural services for the new home office building, including landscaping and interior design.

NATIONAL INSTITUTE OF MENTAL HEALTH

A new publication has been inaugurated by the National Institute of Mental Health to facilitate the dissemination and exchange of information in the field of drug dependence.

The new quarterly journal, "Drug Dependence," is prepared jointly by the Institute's Division of Narcotic Addiction and Drug Abuse and its National Clearinghouse for Mental Health Information to answer a recognized need for a professional publication in this area. The journal will serve scientists of many disciplines, legislators, lawyers, teachers, students, and others.

"Drug Dependence" will present abstracts, original articles by professionals in the field, and an occasional reprint to give an historical perspective to the problem of drug abuse.

Individuals or institutions involved or interested in the field of drug addiction or related areas may be placed on the mailing list for "Drug Dependence" by writing to the National Clearinghouse for Mental Health Information, National Institute of Mental Health, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015.

Copies of **Drug Dependence** can be purchased for 50 cents each from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

ANNOUNCEMENT

Ophthalmologists and otolaryngologists are invited to attend a luncheon seminar on cryosurgical procedures in EENT on Sunday, Oct. 4, 1970, Dunes Hotel, Las Vegas, immediately preceding the opening on Oct. 5 of the American Academy of Ophthalmology and Otolaryngology annual meeting.

For information write: Secretary, Society for Cryosurgery—30 N. Michigan Avenue, Chicago, Illinois 60602.

The Month in Washington

The Internal Revenue Service postponed until Jan. 1, 1971 one provision of a new requirement that health insurance companies report to the IRS payments of \$600 or more a year to a physician.

The delayed provision covers payments other than those under Medicare and Medicaid. Payments of \$600 or more under these government programs must be reported to the IRS. A spokesman said the reporting of payments other than under the government programs was delayed for a year to allow further time for working out compliance procedures.

The IRS regulation applies only to direct payments to physicians. The Senate added an amendment to an omnibus tax bill that would have extended the requirement to indirect payments also, but House-Senate conferees took out the amendment.

Another provision unfavorable to physicians was knocked out of the tax bill, but a third was retained.

The Senate rejected a proposal that would have restricted the tax advantages gained by physicians who organize professional corporations under state laws to establish retirement plans. The Senate Finance Committee had added an amendment that would have set an annual limit of \$2,500 per individual, the same as specified under the so-called Keogh law. But the Senate, by a vote of 65-25, knocked out the amendment, leaving physicians, lawyers, engineers, and other members of professional corporations able to set aside as much of their income for retirement as they choose.

As finally passed by Congress, the measure includes a provision putting congressional approval on an IRS ruling that advertising revenue of medical and other non-profit, tax-exempt organizations is subject to the regular corporate income tax. Journals of state medical societies, as well as the Journal of the American Medical Association, are affected.

* * *

Medicare's Part B premium partially covering physicians' fees will go up from

\$4 to \$5.30 a month next July 1.

Health, Education and Welfare Secretary Robert H. Finch blamed his predecessor in the post, Wilbur J. Cohen, for the size of the 32% increase in the premium which is matched by the federal government.

Finch noted that the present \$4 premium rate, set in December 1968, was too low to cover costs during the current premium period and that the special Medical Insurance Trust Fund has been drawing on its reserves. He said that failure to increase the premium rate last December, in accordance with advice from Social Security Administration actuaries, had made it necessary now, in effect, to promulgate two increases at once. Moreover, the depletion of the trust fund that has occurred because of the inadequate rate had made it necessary, he said, to provide for a somewhat higher margin of contingency than would otherwise be necessary.

About half the increase, 64 cents, was needed to finance the program at the level of current operations. The other 66 cents of the \$1.30 increase was distributed:

- 26 cents to cover an estimated increase of about 6% in the level of physicians' fees;

- about 12 cents to cover an estimated increase of 2% in the utilization of services under the program;

- about 6 cents because the \$50 deductible which a patient pays will be a smaller proportion of the total covered charges;

- the remaining 22 cents to provide a 4% margin for contingencies.

* * *

President Nixon signed into law legislation setting tough federal safety standards for coal mines.

Although he had reservations about a conflict with state workmen's compensation laws, Nixon said "the health and safety provisions of this act represent an historic advance in industrial practices." He also cautioned that this law should in no way "be considered a precedent for future federal administration of workmen's compensation programs."

The Secretary of Health, Education and

Welfare was given for the first time authority to set health standards for mines. Nixon said he had asked that wherever possible the disability standards under the new act be consistent with those of the Social Security disability program.

Pressure for the legislation started building up after 78 died in a West Virginia mine disaster last November.

The AMA supported an overall Administration bill on occupational health and safety, and pledged the backing of the nation's physicians for any program well designed to improve the safety and health of the American worker."

Dr. R. Lomax Wells, Silver Spring, Md., immediate past chairman of the AMA's Council on Occupational Health, told a Senate labor subcommittee:

"... the American Medical Association supports the new Administration bill, S. 2788. Its provisions for standard setting, not in the Labor Department but in a new National Occupational Safety and Health Board appointed by the President, with a majority of professional experts, seems to us an acceptable equivalent to our previous suggestion of a National Council on Hazardous Physical and Chemical Agents. We endorse its concept of a separation of powers between standard setting and enforcement. We welcome, in this new bill, the intent to give a larger role to the Department of Health, Education and Welfare, whose competence in this field is recognized. Our Association approves the provision for federal support of state occupational safety and health programs to supplement inadequate manpower in the federal system. We believe that this emphasis on support of the state programs, combined with standard setting by an independent professional Board, is greatly preferable to mandatory national standards promulgated and enforced by a single federal agency. In this regard, we welcome the stress on the use of consensus standards, and provisions for consultation with professional standard-setting agencies before establishing needed new standards."

A National Heart and Lung Institute task force predicted that the demand for heart transplants will increase beyond the present level of about 100 a year and exceed the number of the organs available for the operation.

The report of the task force on cardiac replacement also said:

—Less than 16% of the 200,000 Americans under 65 who die each year from heart disease are good candidates for transplants.

—Rejection of the transplanted heart will remain "the greatest barrier to prolonged survival."

—Development of an artificial heart is now a distinct possibility.

—The federal government should emphasize research on the prevention, early detection and early treatment of heart disease.

—A new definition of death is needed.

—Total transplant charges for 36 patients averaged \$18,694 per patient.

—Heart transplants have been performed on 148 patients, with 23 persons still surviving, 16 of them in the United States.

—More than 32,000 heart disease victims can be considered transplant candidates, but there are only about 22,000 possible donors a year, the report said.

* * *

The Food and Drug Administration was reorganized and given independent status under a new commissioner.

The reorganization followed several years of criticism of the Health, Education and Welfare Department agency from all sides—Congress, industry, and consumers' groups. The criticism resulted in a two-month study by a task force headed by HEW Deputy Assistant Secretary for Welfare Fred Malek.

The reorganization focused on FDA's structural problems and the chief aim of HEW Secretary Robert H. Finch appeared to be to get the agency operating more efficiently. FDA was taken out of the Consumer Protection and Environmental Health Service and placed in the department's staff structure on an equal basis with the

remaining Environmental Health Service and the National Institutes of Health.

Classified Advertisement

PUBLIC HEALTH—The Virginia State Health Department has positions for energetic physicians who, as state employees, are assigned to direct public health and medical care programs in local health districts. Programs include traditional public health services plus activities under medicare and medicaid. In-service training and opportunity for post-graduate study provided. Liberal fringe benefits. Qualifications—American citizen or declaration, license to practice medicine in Virginia at time of employment, age under 55 (under 60 if M.P.H.), and two years' experience in civilian or military practice. Salary \$17,900 with regular increments to \$21,400 in 3½ years. \$19,600 to \$24,500 in 4½ years with M.P.H. in districts over 100,000 population. Inquire director, local health services, Virginia State Department of Health, Richmond, Virginia 23219.

An NIMH residency stipend will be available July 1, 1970 in a fully approved three year training program at the Medical University of South Carolina. The stipend is \$12,000 with a dependency allowance of \$500 per dependent. Applicants must have graduated from a U. S. Medical School and engaged in practice or training other than psychiatry at least four years since internship. Please apply to R. Layton McCurdy, M.D., professor and chairman, 80 Barre Street, Charleston, South Carolina 29401.

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IN THIS ISSUE

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The Feasibility of an Assistant to the Physician

LEE POWERS, M.D.* AND ROBERT HOWARD, M.D.†

Our nation faces a serious and growing shortage of health service manpower. Technical advances, therapeutic progress, and greater use of allied health personnel have resulted in increased physician productivity. This gain, however, has been overbalanced by the markedly increased demand due in part to (1) population growth, (2) maldistribution of physicians and facilities, (3) higher incomes and consequent increase in effective demand for medical care, (4) higher educational levels, (5) health insurance, (6) Medicaid and Medicare, (7) the aging population, and (8) complex diagnostic and therapeutic procedures which require more of the physician's time.

In a recent talk a nationally known physician succinctly characterized the present crises in medical services in the following way:

This country is now almost overwhelmed by crises resulting from increasing health costs, by demands for incentives and control of quality and costs in the newly legislated programs, by inadequate health manpower, by obsolescence of facilities, and by tensions resulting from the battle between those attempting to maintain the status quo and those wishing to change.¹

While this statement encompasses most of the problems involved in the health services gap, this paper will deal with only one of the important issues—inadequate health manpower.

Our Manpower Needs

The American public and the medical profession are becoming seriously concerned over the very real crisis of our inadequate

health services and particularly the critical shortage of physicians and supporting personnel.

A prominent medical educator in the forties warned of the growing crisis in medical manpower and suggested the training of a second-level physician similar to the "Feldscher" in Russia. This suggestion met with a storm of protest. In the late fifties the President's Commission on Health Manpower produced the now famous Bane-Jones report, which urged that medical school graduating classes must reach at least 12,000 physicians by 1970 to avert a health crisis. This report helped materially to crystallize the concern of the medical profession and medical educators about the increasing crisis. Our federal legislators were influenced to appropriate matching construction funds for health education facilities—and lately, direct support for educational programs—in an attempt to increase the production of health manpower.

In 1968—only two years from 1970—our medical and osteopathic schools graduated less than 9,000 physicians. There are some 20 new medical schools now in various stages of completion, and most of the existing schools are expanding enrollments. This is only a token compared to the growing demand for physicians. One must recognize that from the time the decision is made to build a new medical school it will be 12 years before its graduates are practicing medicine.

Our educational institutions have not and will not be able to supply the physician manpower to meet the increasing demand unless the present system of the delivery of medical services changes.

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Medicine within the United States remains a cottage industry, and most attempts to secure cooperative endeavors between the various medical service resources within a region or even a community have not yet been successful. This uncoordinated system, if one can call it a system, continues in spite of the Regional Medical Programs, Comprehensive Health Programs, and an infinite number and variety of other hospital, community, and health planning organizations. As the crisis in the provision of medical services increases, however, it is likely that the public will force a more efficient coordinated system.

New Categories of Health Workers

Increased physician productivity must be a major consideration in any solution. Larger numbers and new types of supporting personnel are urgently needed. The health industry is now the second largest employer; it is expected to be number one in 1975. There are 10 allied health workers per physician today, and the need in 1975 is estimated at 15 to 17 per physician. Each year new types of allied health workers are demanded, such as nuclear medicine technicians, ultrasonic technicians, laser beam technicians, physician assistants, and others.

In 1963 Dr. Eugene Stead of Duke University Medical School proposed the training of a dependent physician assistant rather than an independent second-level physician such as the *feldscher* in Russia. It appears certain that the American public and the medical profession will never accept a second-level independent physician. Approximately ten other institutions including the Bowman Gray School of Medicine are now training various kinds of physician assistants. The Duke Physician's Assistants Program has accepted 40 students this year and plans to enlarge to 100 in the near future. Requests are being received from all over the United States for Duke's graduates.

Considerable evidence has accumulated which indicates the following: The urgent need to provide some relief to the many overloaded physicians, particularly the first contact physicians, the family practitioners, the general internist, and the general pedia-

trician. The physician in these categories is faced with an intolerable load, which prevents his living a normal family life and makes it impossible for him to keep up with his profession. In a recent nationwide sample survey over 60% of the responding physicians in these specialties reported that they were either refusing to accept new patients or were planning to do so.²

2. Many physicians have indicated an interest in employing a trained physician⁵ assistant. A survey of physicians in Wisconsin in 1966 indicated that approximately 2,000 would be interested in employing a physician assistant.³ A nationwide sample survey in 1968 revealed that over 50% of the responding physicians would employ such a person.²

3. Studies have shown that a physician assistant may increase the number of patients a physician can care for by 30 to 60% depending upon the specialty. Dr. E. Harvey Estes, Jr., of Duke University School of Medicine, has pointed out: "The physicians working with our initial group estimate that they can see 30 to 50% more patients per day with a physician's assistant. If the lower figure (30%) proves to be representative, and if half of the practicing physicians use such assistants, the impact would equal 50,000 added physician man-years per year if the increased efficiency were used in seeing more patients."⁴ Studies involving pediatrics indicated that more than a 50% increase in productivity is possible.⁵⁻⁷

4. Several studies of patient reaction to the physician's assistant have revealed that patients will accept an assistant readily if they know his role and know that he communicates readily and effectively with the physician.⁸⁻¹⁰

Many questions and problems involving the use of physician's assistants have arisen. Among the more important are (1) the legal status of the assistant, (2) professional liability, (3) the accreditation status of hospitals where physician's assistants are used, (4) acceptance by other health workers, particularly nurses, (5) cost factors, and (6) functions of the physician's assistant.

Legal Status

The legal implications are perhaps the most complicated. The discussion which follows has been derived from a resource document prepared by the staff of Duke's Department of Community Health Services for a meeting in October, 1969.¹¹

The simplest possibility is to maintain the status quo. There is nothing in the North Carolina Medical Practice Act to prohibit the employment of a physician's assistant any more than there is for other dependent employees. There are definite risks, however. Under the master-servant doctrine, the physician is responsible for negligence on the part of any person in his employ. This liability exists regardless of licensure or any other formal arrangement as long as the employment relationship exists.

An additional risk of liability that might occur if no change is made in the present situation relates to possible malpractice suits against the physician for delegating any functions to the assistant, because even if the assistant is not proved negligent, the delegation itself may be found by a jury to be improper. This involves the so-called common usage or local accepted practice. The physician is generally judged against a "locality" standard. There now are so few that physician's assistants employed common practice or usage situation has not been established. Among other drawbacks of maintaining the status quo is that there is no provision for formal public protection in the form of standards and qualification requirements of training for a physician's assistant.

Another possibility is the modification of the Medical Practice Act authorizing general delegations. Four states at present have general statutory provisions authorizing supervised delegation of functions. Typical of these is the Oklahoma statute, which reads as follows:

. . . nothing in this article, shall be so construed as to prohibit . . . services rendered by a physician's trained assistant, a registered nurse, or a licensed practical nurse if such service be rendered under the direct supervision and control of a licensed physician.

While such statutes have great flexibility,

there must be added a definition of what qualifies a person to be a "physician's trained assistant." All states in their licensure and medical practice acts require that the physician be a graduate of a medical school approved by either the AMA or the AAMC or both. The AMA has a committee presently working on essentials for approval of physician's assistants training programs. This committee has already approved the essentials for an orthopedic assistant which will be presented to the House of Delegates at their next meeting for formal action. If statutes such as that of Oklahoma included the requirement that a physician's trained assistant be a graduate of a training program approved by an accrediting agency such as the AMA or by a state medical licensing board until an accrediting agency is established, it might be the most satisfactory solution in the initial period of this development.

Another possibility is the licensing of physician's assistants as a new category. This has advantages and disadvantages. One of the advantages is the enhancement of the status of the physician's assistant and protection of the public by specification of minimum qualifications and official delineation of the physician's assistant's functional sphere, though of course liability for negligence would still exist. One of the main disadvantages is the fixing of the functional activities of a physician's assistant. This problem exists today in some of the health professions, and as new practices change functions, the licensee may be so circumscribed that new functions cannot be added. An example is the practice acts of the licensed practical nurse. It is reported that a large number of LPN's are now performing tasks which are illegal under their practice regulations.

The licensure of the employer (physician or institution) to employ physician's assistants has been suggested. This would have the advantage of setting up the criteria for employment, training requirements, and task delegation. This solution might be rather cumbersome and slow in acceptance.

The final possibility suggested is the leg-

islative establishment of a Committee on Health Manpower Innovation, under the auspices of, and responsible to, the State Board of Medical Examiners. It would be composed of representatives of all health professions concerned with problems of manpower shortage, such as physicians, nurses, and hospital administrators, and possibly a representative of the general public. Any group wishing to initiate a program for training a new manpower category would submit a written proposal for committee consideration, detailing its objectives, curriculum, faculty, and facilities. The group should be prepared to show that the program is responsive to a need that is not satisfied by existing personnel and that patient safety has been assured. If tentatively approved, the program could be put into operation, but periodic follow-up reports, including evaluations by those using members of the new category, would be required. After two years of successful operation under such observation, the program would be eligible for approval but would be subject to continuing review at five-year intervals. This plan would facilitate the perpetuation of categories that prove successful, the elimination of unsatisfactory ones, and the modification of programs as the need arises. It obviously would have implications beyond the immediate problem of physician's assistants, and would facilitate innovation with respect to roles for established personnel as well as the creation of new manpower categories. Such an approach would further the public interest by insuring that experimentation is controlled, and by encouraging more efficient medical care delivery through the removal of some of the obstacles that even responsible innovation meets today. It would eliminate the necessity of going to the legislature with each new category or role innovation, and the attendant problem of "developing workable definitions not subject to speedy obsolescence."¹¹

Professional Liability

The problem of malpractice coverage has been largely resolved as far as costs are concerned. During a recent meeting of the Insurance Rating Board it was agreed that

present malpractice coverage of physicians would continue at about the same premium rates, with the addition of a physician's assistant in the physician's liability contract in the same manner that other employees are covered. It was further agreed that a physician's assistant could obtain malpractice coverage at rates considerably lower than the physician rates.

Hospital Accreditation Status

The Joint Commission on Accreditation of Hospitals has recently included in their essentials for accreditation a provision covering dependent workers of staff physicians, making it possible for physician's assistants to assist the employing physician in the hospital without jeopardizing the accreditation status of the hospital.

Acceptance by Other Health Workers

The acceptance of the physician assistant by nurses and other allied health workers is important. Experience from the Duke program indicates that the nurses and technicians in their hospital, after they understood the functions of the physician's assistant, found that the assistant actually facilitated their work, and cooperation is excellent.¹²

Cost Factors

Several facets of the cost factor in the use of an assistant by a physician have created considerable interest. Physicians are interested in the rate of pay of physician's assistants. Duke graduates are obtaining positions with a starting salary in the range of \$10,000 a year. The effect of the employment of a physician's assistant on patient care costs is also of interest. Will this increase or decrease patient visit costs? It is too early for an answer to this question.

Functions of the Physician's Assistant

A question often heard is, how do the functions of the physician's assistant differ from those of a nurse. Perhaps the easiest way to answer this question is to list the activities of a Duke graduate working for a family practitioner in a small North Carolina town.

Actual functions performed under physician supervision

Hospital

1. Initial history and physical examinations on all incoming patients.
2. Ordering of routine laboratory studies on incoming patients.
3. Organization, collection, and reporting of data on all patients to the physician.
4. Routine hospital rounds with patient consultation regarding disease limitations.
5. Patient diagnostic and management procedures, including:
 - a. Intravenous medications.
 - b. Nasogastric intubation and gastric analyses.
 - c. Catheterization of the male patient.
 - d. Drawing of arterial blood samples and difficult venous blood samples.
 - e. Intravenous catheterization of venous cutdowns.
 - f. Scheduling of laboratory and x-ray studies for maximum efficiency.
6. Discharge physicals and dictation of narrative summaries on all patients.

Office

1. Detailed history and physical evaluations where indicated or instructed.
2. Initial history and physical examinations on routine illnesses with subsequent collection and organization of laboratory data for the physician.
3. Application and removal of casts and dressings.
4. Instruction of patients on specific regimen to be followed and answering of questions regarding extent and limitation of the condition caused by the disease.
5. Routine evaluations and examinations of healthy patients.

6. Scheduling and arranging consultations and laboratory studies to be done in the outpatient laboratory service of the hospital.
7. Provision of first aid care and routine triage of all accident victims.
8. Assistance in filling out narrative summary portion of all insurance forms.
9. Coordination of technical procedures performed by other physician employees.

Summary

The augmentation of physician services by a physician's assistant has been reviewed. Many of the problems and questions which have been raised relative to the employment of a physician's assistant are discussed.

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Comparison of Diazepam and Sodium Thiopental in Cardioversion

JEROME RUSKIN, M.D., AND JOSEPH C. GREENFIELD, JR., M.D.*

The reversion of many cardiac arrhythmias with a DC defibrillator has become widespread, replacing intensive quinidine therapy for the elective cardioversion of atrial fibrillation and flutter.¹ Since the electrical discharge applied across the chest wall is painful, general anesthesia, usually with a short-acting barbiturate, has been employed. Thus, the presence of an anesthesiologist is required, and delays due to scheduling are not uncommon. In addition, there is the small risk of aspiration, laryngospasm, or other potential complications of general anesthesia. To obviate the need for a general anesthetic, diazepam administered intravenously has been used to provide transient amnesia and analgesia during cardioversion.² This report from the cardiology section of the Durham Veterans Administration Hospital relates our experience with the use of diazepam and sodium thiopental in patients undergoing cardioversion.

Material and Methods

Twenty-five male patients with atrial fibrillation and five with atrial flutter undergoing 40 consecutive cardioversions from July 1968 to July 1969 at the Durham Veterans Administration Hospital are subjects of this report. Rheumatic heart disease was present in 13 patients, and coronary heart disease in 8. Other lesions included idiopathic hypertrophic subaortic stenosis, ruptured sinus of Valsalva aneurysm and atrial septal defect (both postoperative), idiopathic myocardial hypertrophy, and hypertensive cardiovascular disease. One patient had recently undergone removal of a left atrial myxoma and replacement of an insufficient mitral valve. The etiology of the heart disease was unknown in two.

In order to eliminate any possible bias on the part of the investigators, the sequence

of administration of diazepam and sodium thiopental was randomized by drawing cards at the time of cardioversion from sealed, consecutively numbered envelopes. The cards, indicating which of the two agents was to be administered, had been previously randomized. The age range of patients receiving diazepam was 36-74 years (mean 50.7) and of those receiving sodium thiopental 30-73 (mean 51.1). All subjects except one were taking quinidine, and digitalis was temporarily withheld in all. It is our practice to withhold digitalis for two days prior to cardioversion in an attempt to lessen the incidence of those arrhythmias seen after cardioversion that appear to be digitalis related.

All procedures were carried out in an operating room suite, with an anesthetist in attendance. Sodium thiopental was administered intravenously in increments of 40-80 mg every 20-30 seconds until sleep was induced, with loss of the lid reflex. Diazepam* was administered intravenously in increments of 5 mg/min, until slurring of speech was observed. An additional 2.5-5 mg was then usually sufficient to induce light sleep. Synchronized shocks in increasing energy levels beginning at 50 watt-sec (10 watt-sec in patients with atrial flutter) were administered, utilizing a Hewlett Packard Model 7802-B defibrillator equipped with either anterior-posterior or two anterior paddles, until either reversion occurred or the procedure was terminated.

Patients were questioned for recall of the number and severity of shocks at 15 min and at 2, 4 and 24 hours after cardioversion. Alertness at these times, as well as prior to the procedure, was evaluated by the patient's ability to repeat serial numbers; sensitivity to pain was judged by the response to pressure over the styloid process (Libman test), and a rough estimate of the patient's anxiety level was made.

From the Cardiology Section, Medical Service, Durham Veterans Administration Hospital, Durham, North Carolina, 27705.

*Dr. Greenfield is the recipient of a Career Development Award, 1-K3-HE-28, 112, from the National Heart Institute.

*Supplied as Valium by Hoffman La Roche, Inc., Nutley, New Jersey.

Results

Both diazepam and sodium thiopental were administered 20 times to 30 patients. Twenty-two patients underwent cardioversion once. Of the eight remaining patients one received both diazepam and sodium thiopental twice, five patients received both drugs once, one patient received diazepam twice, and one received sodium thiopental on two occasions. The dose of diazepam administered ranged from 7.5-50 mg; the average dose was 24.8 mg. Adequate amnesia and analgesia were obtained in 14 patients. Four patients required small (60-80 mg) supplementary doses of sodium thiopental because of inadequate sedation; two of these patients had been taking diazepam chronically by mouth. Thirty-five shocks were administered to those with atrial fibrillation, from 25-400 watt-sec in intensity with a mean of 186 watt-sec. Two patients failed to convert, despite maximal current discharge; attempts were discontinued in one because of frequent premature ventricular contractions (PVC). Of the three patients with atrial flutter, two converted on single discharges of 10 and 25 watt-sec respectively; one remained in atrial flutter after five shocks from 10-300 watt-sec in intensity. One patient had a transient fall of blood pressure 30 minutes after cardioversion that did not require therapy, and one patient suffered a pulmonary embolus after cardioversion.

Sodium thiopental was given in doses of 160-460 mg, with an average dose of 265 mg. Twenty-six shocks of 25-300 watt-sec intensity (mean 153) were administered to those patients with atrial fibrillation. Two patients failed to convert, and three had multiple PVC's with bigeminal rhythms after cardioversion. Two patients with atrial flutter converted with single shocks of 25 watt-sec. One patient developed laryngospasm requiring a deeper plane of anesthesia for relief.

The two groups of patients receiving either diazepam or sodium thiopental were comparable as judged by their sensitivity to pain and degree of anxiety prior to or following cardioversion. There was no discern-

Table I

	Systolic Blood Pressure \pm SE Before, Immediately After and Fifteen Minutes After Cardioversion		
	Before	Immediately After	15 Minutes After
Diazepam	117 \pm 4	121 \pm 5 NS	113 \pm 5 NS
Sodium thiopental	117 \pm 4	123 \pm 4 P<0.01	119 \pm 4 NS

ible difference in the subjective responses after diazepam and after sodium thiopental. However, as noted above, 4 of the 18 patients receiving diazepam required supplemental barbiturates. A distinct difference in patient acceptability would have been present in this group if diazepam alone had been used. Three patients receiving diazepam and two receiving thiopental had recollections of jolting or shocking sensations, without the affect of pain. One in each group was still obtunded 15 minutes after cardioversion.

A 4 mm fall in systolic blood pressure 15 minutes after cardioversion was present in our patients receiving diazepam, but this change was not significant ($P>0.20$). The systolic blood pressure was increased approximately 6 mm Hg immediately after cardioversion in those receiving sodium thiopental ($P<0.01$) (Table 1).

Discussion

The development of DC cardioversion has greatly simplified the management of many cardiac arrhythmias.¹ The need for general anesthesia has limited its application, especially in areas where anesthesiologists are not readily available. Sedation with narcotics, such as meperidine or morphine, has generally not proved satisfactory. Nutter and Massumi² first recorded the effectiveness of diazepam in providing analgesia and amnesia during cardioversion. Subsequent reports³⁻⁴ have confirmed their findings. In our patients, 4 of 18 receiving diazepam failed to attain adequate sedation. Two of these patients, however, had been taking diazepam routinely by mouth. Their failure to respond to large doses (as much as 50 mg) of medication administered intravenously suggests that tachyphylaxis occurs.

The dose of diazepam required for sedation in our subjects was higher than that

generally reported. Kahler and others³ found 10-12 mg to be adequate for most patients, with an average dose of 13.9 mg (0.091 mg per pound). Discounting the two patients previously receiving diazepam, the average dose required for sedation in our group was 22 mg (0.13 mg per pound). There is no explanation readily available for this increased requirement. In general, older patients required smaller doses; only two of our patients were over 60 years of age.

In the series by Kahler and others,³ a mean fall in systolic blood pressure of 4-5 mm Hg was present in those patients undergoing cardioversion after receiving diazepam. A similar fall of 4 mm Hg in systolic blood pressure was noted in our patients 15 minutes after cardioversion, but this reduction in blood pressure was not significant.

In comparing the use of diazepam to sodium thiopental, Meunster and others⁴ found the frequency of PVC's to be significantly lower in those receiving diazepam, both after administration of the drug and before and after subsequent cardioversion. In the present series, three patients receiving thiopental had PVC's with bigeminal rhythms after cardioversion. In one patient receiving diazepam, attempts at cardioversion were discontinued after a single shock of 200 watt-sec, because of persistent premature ventricular contractions. The success rate of cardioversion did not appear to be affected by the choice of agent for analgesia.

The present study was carried out in an operating room suite with an anesthesiologist or nurse anesthetist in attendance. It has remained our practice to perform elective cardioversions in this manner so that personnel trained in patient ventilation are present if needed. Although emesis was not noted in our patients, aspiration may occur after either intravenous thiopental or diazepam. We, therefore, maintain our patients in the fasting state for elective procedures. However, we have successfully used diazepam for cardioversion in emergency or semi-emergency situations in all parts of the hospital, without requiring the presence of an

anesthesiologist. Under these circumstances, diazepam has proved extremely useful when cardioversion was required in patients who had recently eaten, and in whom general anesthesia was contraindicated. This drug has been used with success in the coronary care unit in patients requiring cardioversion of ventricular arrhythmias.

Although respiratory depression was not present in our patients, slowing of respiration and the development of Cheyne-Stokes respiration, not requiring respiratory assistance, has been reported.⁵ Means of supporting respiration should be immediately available when administering diazepam intravenously.

Summary

The results of diazepam and sodium thiopental were compared in 30 patients undergoing 40 consecutive elective cardioversions. Supplemental doses of thiopental were administered to 4 to 18 patients receiving diazepam; 2 of the 4 were chronically taking diazepam by mouth. In the others, there was no detectable difference in the patient's responses to the two drugs. Diazepam offers an acceptable alternative to the use of general anesthesia for cardioversion in most patients.

Acknowledgement

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Concerning Some Problems of Soviet Medicine

VLADIMIR DYAGILEV

Translated by Pavel Shikman

I believe Soviet medicine is experiencing what could be called growing pains. On the one hand, we observe unquestionable attainments: there are more than 25 physicians per 10,000 of population. The Soviet Union has the world's lowest mortality rate, and average life expectancy has increased to 70 years. Allocations for medical purposes are steadily growing: in 1968, for example, they will exceed 8,000,000,000 rubles. That means the state is spending 14 rubles (\$38) per citizen. The USSR has 350 medical research laboratories and its medical institutes boast more than 3,000 faculties.

A new document of great political significance was published quite recently—a Soviet government decision outlining a concrete program for the improvement of medical services in the country. New large clinical hospitals and polyclinics will be set up as well as research institutes and enterprises for the medical industries. Many new medical institutions will go up in the countryside. A one-year course of specialization in basic clinical specialties has been introduced for young physicians just graduated from medical institutes.

On the other hand, there still exist, to my mind, many unsolved problems, and the greater the achievements of Soviet medicine, the stronger the desire to draw the attention of the medical people and the wide public to them so as to do away with obtaining shortcomings.

Medical Misfits

Soviet sociologists recently distributed a questionnaire among secondary school graduates: "What do you want to be? Why?" A year later—a second one: "What have you become? Are you satisfied with your choice?" The result: more than 36 per cent had misfired. That means that young people are not beginning their lives right, are not

following their calling. Hence, disappointment, dissatisfaction, depression and, later, indifference, callousness and formalism.

That's how a kind of "moral vacuum" develops in future specialists. It is "spoilage" in any profession . . . in medicine it's a

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For editorial comment see page 100.

crime. About 25 per cent of those applying for admission to medical higher schools are not prepared for the work of a physician, do not understand it, and are not striving towards it heart and soul. But they meet entrance requirements, are enrolled by competitive examination, and eventually get their diplomas and become physicians. What made them choose a medical higher school in the first place? Various reasons: their parents wanted them to, and "because my girl friend did," and "because it was harder to gain admittance at other institutes (the latter in the case of boys who sometimes enjoy a certain degree of indulgence when seeking admission to a medical institute), and so on, and so forth. They are enrolled, of course, but on realizing they erred, do not have the courage to leave.

Imagine the following notice: "You will be treated by a physician who does not like his profession." Would you apply to such a person? Such notices, alas, are not posted, and you find yourself in the presence of such a physician. Sometimes he treats you and sometimes . . . mistreats you.

*An abridged version of an article published originally in the Soviet magazine "Oktyabr."

The general higher school admission rules should, probably, not be applied to medical higher schools. The future physician should certainly know his spelling and syntax, but there are other qualities which are much more important.

So what is to be done? How can the situation be remedied? Perhaps applicants should be selected by special examining bodies and medical institute staff far in advance of the official admission period. Say, they go off to different secondary schools and *technikums* where they have heart-to-heart talks with the young, try to single out who has an aptitude for medicine—do what the Siberian mathematicians are doing. Perhaps senior-form pupils should be allowed to work as hospital attendants. Perhaps future medical students should be recruited from among nurses and doctor's assistants who in their practical work display a genuine inclination for medicine? Or perhaps introduce a charge for tuition at medical institutes, at least during the first two years. It may be that those who do not prize this profession will not enroll if they have to pay for their tuition.

There may be other solutions of this urgent problem.

Iatrogenetic Problems

Another major problem—frequent, every year increasing instances of iatrogenicity.

In addition to the purely subjective causes of its emergence, there are general ones of a more objective nature.

Misuse of the physician's time

Physicians are approached by different people with different nervous systems—mistrustful, emotionally unstable, easily hurt; an individual approach has to be practiced; everyone thirsts for the physician's personal word.

This first of all requires time. Tons of paper have been covered with proof that the physician's valuable time is being utilized irrationally—all kinds of records, cards, reports and the like have become a virtual cancerous tumor in medicine. It's ridiculous to deny the importance of medical documentation, but it must be cut down at least by

half and the remaining half should be streamlined by means of up-to-date technical facilities—and not only at large scientific centers, but in every polyclinic. Every hospital should have dictaphones, tape recorders, stenographers, and typists.

All this, first of all, calls for an ability to apply the medical word. Our institutes, unfortunately, do not teach future physicians the gift of the word. Techniques, laboratories, analyses first captured and then deprived the word of its strength and power.

Medical propaganda

Another issue related to this problem—the dissemination of medical knowledge. Is it beneficial or harmful? The layman says: "beneficial"; most of the medical workers—"harmful."

Various publishing houses every year release scores of books which in one form or another propagate medical knowledge among the population. The radio and television networks and the society *Znaniye* (Knowledge) extensively resort to medical propaganda in their broadcasts and lectures. It was precisely medical propaganda (along with prophylaxis, vaccinations, injections, etc.) that helped to prevent gastrointestinal diseases during the Soviet Union's most trying years. There are many examples confirming the benefit of medical propaganda, but we began to overdo it at a certain point.

The layman today is told not only of disease prevention measures, but is briefed on disease symptoms, treatment, and complications. Millions read generally available medical books, and frequently to their own detriment.

Really, what do we observe?

A patient with his head full of medical information comes to a physician and doesn't believe a word the latter says, because he had read quite different things in medical books about the disease he suspects he is suffering. But the book deals with the matter in general, while the physician in charge speaks of a concrete individual. The physician prescribes biomycine, but the patient objects: "Why not tetracycline? I read that . . ." and, of course, does not take the

prescribed medicine and treats himself as he sees fit on the basis of what he has read in medical books.

People who do not have special medical training and are not versed in anatomy or physiology frequently fall victim to iatrogenic disorders. They begin to suspect they are suffering various illnesses, make their own diagnosis, and treat themselves. Then when they see that their own treatment is not getting them anywhere they turn to a physician. But it is very hard to cure such a patient: the latter does not have confidence in the physician and continues his own ministrations. It is no mere chance that penicillium-resistant forms of microbes have made their appearance lately. Antibiotics are not as effective as they used to be, and physicians are worrying their heads off trying to find new means to counter this phenomenon.

One thus arrives at the conclusion that medical propaganda must be regulated and strictly controlled. Physicians should be taught how to treat by force of word, and favourable conditions should be created for such kind of treatment.

"Analysis Mania"

Another problem—the so-called analysis mania in modern medicine.

We witness today frequent instances when science and engineering, that had originally joined up with medicine as true aides, are being used to substitute for the physician's thoughts and reasoning, and misgivings at times arise—not at all unfounded—that the further unrestrained and inept application of science and engineering in medicine is threatening to turn the physician into an obedient servant and slave of his apparatus.

"I am ready to take my hat off to Roentgen, but I will keep my head," said an old physician at the time x-rays were first discovered and applied in medicine. Alas, many specialists today, especially among the young, "take their heads off" to Roentgen apparatus, to laboratory research and to modern equipment, which by themselves, regardless of how perfect and objective the

information obtained with their help, are nil without a thinking, reasoning physician.

Scores of clichés have already been created: this particular disease calls for the following complex of examinations and analysis, another disease—another complex. And if the physician in charge of the case has not brought the complex up to the "supreme standard," that is, has not performed all the examinations and analyses specified for the particular disease, then he will be corrected at a higher level—the department or ward head will prescribe the omitted analysis, and the latter will in his turn be corrected by the consulting professor who will order additional analyses and examinations, more intricate and involved, but in effect differing little from what the doctor in charge prescribed in the first place.

A slight digression on dissertations and dissertators is at this point most timely. Every year hundreds of physicians in the USSR defend dissertations and qualify for master's and doctor's degrees in medicine. It's ridiculous to deny the progressive significance of this fact. But young physicians frequently move into higher science direct from college. More, postgraduate courses and a master's degree have become the vogue with a certain portion of the student youth.

The fact that the young are striving towards scientific research is fine. What's bad is that young people frequently devote themselves to the solution of purely theoretical problems, not having had any practice. Such theoreticians later on look down upon the practitioner who does not boast a degree. They hold executive posts, set themselves up in clinics and effect guidance over practicing physicians, persistently carrying through their own views. They are not strong in practical medicine and cannot treat patients, but they are versed in theory and very actively and zealously propagate analysis mania and theorization to uphold their status. Even though there are not many such scientists, they still exist and are hardly any good by exaggerating examination and analysis.

Now regarding continuity. It is frequently violated in our medical practice. If a patient

is transferred to another clinic or another hospital, or even to another physician in the same clinic, the latter for some reason considers it his duty to begin from "scratch," and the first thing he does is to again prescribe a complete set of analyses. The money, effort and time of people and institutions occupied in these examinations and re-analyses, frequently duplicating one another, could be employed much more efficiently. It is necessary to expand the scale of mass examinations among the population so as to bring to light malignant disorders and hypertension at an early stage, just as fluorographic tests are now being conducted to disclose tuberculosis and those predisposed to it.

This could be organized by using funds and facilities that are at present expended on unnecessary re-analyses, and by streamlining the obtaining system of medical examination. This should be tackled in all earnest and on a country-wide scale.

Allied Health Fields

At least brief coverage should here be given to the question of training specialists in the so-called applied, related professions.

Practical experience has shown that large clinics, research institutes and hospitals need their own designing bureaus, workshops and personnel specializing in medical equipment and apparatus. The complex, expensive, and frequently unique Soviet-made and foreign apparatus needs skilled technical handling and servicing. Workshops attached to clinics and hospitals could take upon themselves the servicing and maintenance of medical equipment, the modernization of old and the design of new apparatus. Enthusiasts are not lacking, but there is no substantial material and technical basis. Specialists—engineers, technicians and mechanics—are needed who would be well-versed in medical engineering and techniques.

Care of the Aged

And another problem—that of "chronics." There really are no such patients. There is

acute appendicitis, there is peptic ulcer, there are the same disorders only in a neglected, undiagnosed, or incorrectly treated form. A neglected disorder is called chronic, and to apply the concept "chronic" to people of an advanced age is particularly fallacious. This, firstly, because of the above-mentioned reasons and, secondly, because the course of a disorder among the aged is more protracted and the cure slower as their disease resistance is lower and their vitality on the downgrade.

Just as there are diseases of infancy and childhood, so are there diseases of the aged. But while we place those of childhood into a separate branch, we keep mum about those of the aged. Gout, pellagra, sclerosis, hypertension, and others are unquestionably old age disorders. But treatment of the aged is not organized. There should be special hospitals and clinics—both free of charge and on payment—for the "chronics." Not homes, but hospitals for the aged, and preferably out of town.

How can this be financed? I have a definite proposal: hospitals and clinics should be set up with home nursing and other medical services on payment. Many relatives lacking the time or necessary domestic facilities to look after and care for the aged sick would gladly agree to pay for specialized medical treatment and care. We have crippled our potentialities by the free service conception. This is free, that is free . . . but is that always beneficial? Life has shown that it isn't.

Conclusion

There is a term in medicine: "a practically healthy person." The latter may have a toothache, suffer vitamin deficiency, or have a sprained leg and limp, but practically speaking, he is healthy. The same could be said of Soviet medicine. It is, practically speaking, healthy, but here and there there may appear inflammatory processes on its organism; something is impeding its noble functions. An attempt was here made to analyze some of those impediments.

Large Foreign Body in the Vagina

Report of a Case with Technical Difficulties in Removal

F. T. GIVEN, JR., M.D.,* AND H. E. MATTOX, M.D.†

The foreign bodies removed from the vagina could fill a museum of curios. In general, most of these articles are readily extracted by the physician either with or without the aid of anesthesia. Occasionally, though, lodged in the vagina an object will be found which presents a problem in removal. The following case report concerns the difficulties incurred in removal of a highball glass inserted by a patient in the act of masturbation.

Report of a Case

A 35-year-old married white woman, gravida 0, was seen for the first time in the emergency room of De Paul Hospital, on Jan. 18, 1965 on referral by a local general practitioner. She stated that at about 23 hours prior to admission she had inserted a highball glass into the vagina and had been unable to remove it. Because of increasing discomfort she had gone to her physician, who in the course of trying to extract the glass, had broken one edge of it. Moderate bleeding began, and she was immediately sent to the emergency room.

Her past history indicated that she had never been treated for any nervous disorders or significant medical diseases. During the past year, however, she had noted that her menses were becoming more prolonged, lasting anywhere from 15 to 30 days. The flow was not heavy. The last menstrual period had begun Dec. 24, 1964, and had lasted 15 days.

On examination she appeared to be a healthy, obese white woman in moderate distress, relating that she had been unable to void for the past 16 hours. The temperature was 98.6 F, pulse rate 88, blood pressure 160 systolic, 110 diastolic, and weight 168 pounds. A complete physical examina-

tion failed to disclose any abnormalities except in the lower abdomen and pelvis. The bladder was distended, and inspection of the vulva revealed a moderate amount of bright red blood oozing from the vaginal orifice. No foreign body was visible.

By palpation it was realized that a large highball glass filled the vagina, the bottom and smallest diameter of which was pressing tightly against the cervix, and the broken rim, forming the largest diameter, lying about 1 to 2 cm behind the edematous hymenal ring. The glass was markedly compressing the urethra, preventing urination and now producing considerable swelling of the vaginal tissues. No attempt was made to remove the object in the emergency room, because of the patient's obvious discomfort.

Blood studies disclosed the following values: hemoglobin 13.5 gm, hematocrit 42%, white blood cell count 4,800, with 75% polymorphonuclear cells, 6% monocytes, and 19% lymphocytes. Urinalysis of a catheterized specimen obtained in the operating room showed a specific gravity of 1.018, pH 6.0, a trace of albumin, and no sugar. Microscopic examination revealed occasional white and red blood cells.

Soon after admission the patient was taken to the operating room where, under general anesthesia, the perineal area was cleansed with hexachlorophene and draped in the usual fashion. The bladder was catheterized with moderate difficulty and emptied. The first thought was to try to remove the glass intact, and so initially a manual extraction was attempted. This effort failed, because as the rim of the glass was grasped, it seemed to be forced into the adjacent side walls more tightly, so that this type of traction was insufficient to dislodge it.

Next, ring forceps were applied to the broken rim, but when extraction was attempted they slipped off. Rubber-shod for-

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ceps did the same, because the glass adhered so tightly to the vaginal wall.

In the hope that if the suction thus created could be broken the glass could be removed intact, many tongue blades were inserted lengthwise and circumferentially about it, both to facilitate removal and to protect the anterior vaginal wall from further lacerations such as had occurred in the suburethral area when the glass had been fractured before the patient's admission to the emergency room. However, the edematous vaginal introitus was too small to allow insertion of all the blades, and a Schuchardt incision was made to the left of the anus and extended into the vagina. Hematosis was maintained by double O chrome ties. Again, despite the aid of tongue blades placed circumferentially about the glass, it would not come out. Obstetrical forceps and Richardson retractors were next employed in an attempt to pry it out, in the course of which the glass was broken again.

All attempts to remove it intact having failed, the sides of the glass were broken into pieces with a large Oschsner clamp, leaving only the thick base lying next to the cervix. Traction was applied to this part with clamps, without success. In order to break the suction which was probably hindering removal, an attempt was made to drill a hole in the center of this base with an orthopedic drill, but no guide hole could be established in the slick glass surface. Finally, with a double-toothed tenaculum, the base of the glass was turned, breaking the suction, and the entire glass was at last extracted.

The cervix was inspected and found to be apparently nulliparous and clean. Bimanual examination revealed an apparently normal-sized anteflexed uterus. The vagina was carefully inspected. Minor first-degree lacerations were found, but no large defect in the vaginal mucosa was noted other than that resulting from the Schuchardt incision.

The entire area was irrigated as well as possible with saline, and the mucosa, subcutaneous tissue, and skin were approximated in an interrupted fashion with double O chromic catgut. It appeared that all fragments of glass were washed out. No sutures were found in the rectum. The patient tolerated the procedure well, but the time spent under anesthesia was more than two hours.

During the postoperative period she was seen by a psychiatrist, whose evaluation disclosed many problems thought to be amenable to outpatient therapy. The incision healed *per primum*, and she was discharged on the ninth hospital day under the care of a psychiatrist. A reduction diet, oral iron preparation, and Compazine were prescribed. Within a year after her discharge, she and her husband were divorced.

Because of irregular prolonged vaginal bleeding, two dilatation and curettage procedures were later performed; no foreign body or irregularities were found in the uterus. Pathological findings were proliferative endometrium on the first procedure, and secretory endometrium on the second. The irregular bleeding persisted despite the administration of hormones. On Dec. 27, 1966 a total abdominal hysterectomy was performed, revealing two subserosal myomas.

Comment

Foreign bodies in the vagina are usually self-inflicted for purposes of contraception, correction of prolapse, or as an act of masturbation. The preceding case is obviously an extreme example of the latter in an emotionally disturbed woman.

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Insects and Man

CLAUDE A. FRAZIER, M.D.

Insects date back 250 million years. Fossilized insects have been found at about 150 locations in various parts of the world, the richest deposit being in the Amber Pine Forest, in Germany. Here, insects were fossilized in the resin of now extinct pine trees. Small invertebrates were preserved in fine detail and perfection. At least 150,000 insects have been found in the Amber. Other arthropods found as fossils include those resembling May flies, dragon flies, cockroaches, bees, scorpions, and spiders.

Prehistoric cave drawings in Spain show gathering of wild honey from nests of bees. Bees are also reported to Egyptian hieroglyphics and Assyrian cuneiform. The Aztec Indians of Mexico prepared a curious dye from the dried and powdered bodies of scale insects found feeding on prickly pear patches. Locusts and wild honey were considered food delicacies in Biblical times, and the cultivation of bees was a well-developed industry in the time of the Pharaohs.

Less happily, six of the ten plagues of Egypt were caused by insects of some sort. Of these, at least two were attributed to the fly, an insect which was also credited with carrying disease organisms which hastened the decline of both the Athenian and Roman civilizations.

Through the ages, however, insects have become especially adapted to meet all the varied conditions found on earth, whether on plains, mountains, deserts, or in swamps, cities, or countryside. For each area of the earth's surface has insects peculiar to that locale. There are at least 600,000 different kinds of insects.

Characteristics: Useful and Harmful

Incredibly, 85% of all known animals are arthropods—that is, invertebrates with segmented bodies, jointed limbs, and a hard outer covering. Technically, arthropods fall into two classes—*Insecta*, including the yellow jacket, hornet, wasp, scorpion, chigger,

wheel bug, kissing bug, deer fly, and black fly; and *Arachnida*, such as spiders, ticks, and mites.

Of all animals, arthropods are best adapted to survive. Though tiny, they have remarkable weapons of offense or defense. For example, the stinging and biting equipment is an effective weapon, but is often accompanied by aggressiveness. The ability of some insects to jump or fly enables them to escape readily. Hard body surfaces cannot be penetrated. Limbs can be regenerated. Insect shelters, such as webs, cocoons, and earthen mounds, provide protection. Some insects hibernate to stay alive.

Directly or indirectly, insects have far-reaching effects on our lives. On the plus side, insects pollinate certain plants—clover, alfalfa, cotton, tobacco, and fruits, among others. If insects were eliminated, these plants would disappear within a year. The bee is especially adapted for pollinating flowers, and the value of bee products is estimated to reach 50 million dollars annually in the United States. From bees come honey, wax, and industrial products such as cosmetics, carbon paper, shaving cream, and many others.

Many insects destroy dead animals and plants. Maggots have been used medically to clean deep wounds and bone infections. Other insects, like the spider, prey on harmful insects.

On the negative side, of course, are the disastrous epidemics of bubonic plague transmitted by rodent fleas. The great plague of London killed 70,000 individuals of a population of 450,000 between 1665 and 1666. Rodent fleas also transmit endemic typhus, and ticks transmit the well known encephalitis. Mosquitoes carry malaria, yellow fever and dengue, and the common house fly can transmit typhoid by contaminating foods, utensils, or other objects. Some insects damage useful crops.

Some insects bite and some sting. Others, which neither bite or sting, simply eject a

fluid through special glands. Depending on the breed, they will bite and sting from dawn to dusk, with some attacking in the dead of night. Furthermore, they will bite or sting on any part of the body.

Treatment may vary with the size of the species producing the lesion, the type of cutaneous penetration, individual reactions, and the stage of development of the lesion. For the normal or local reaction, simple therapy consisting of ice packs to lessen the swelling is usually enough. Soothing lotions or corticosteroid creams will relieve the irritation, and oral antihistamines can control any itching.

Reactions—General and Local

Insects are being recognized today as the agent of many allergic reactions. Mild reactions to insect venom are undoubtedly common; however, allergic and shock reactions, which can be fatal, are increasing. Statistics show that stinging insects, primarily bees and wasps, kill more people in this country than any other venomous animal, including the rattlesnake.

Information concerning insects has not been readily available to the physician, who often will record the cause of death as shock, allergy, edema, heart failure, stroke, heat prostration, or other conditions, even though evidence exists to the contrary. Coroners also may report the cause of death as "unknown" in such instances. One such case was documented: A 42-year-old Texan, after being stung by a yellow jacket, went into shock five minutes later and died. The coroner reported the death as "Natural—cause unknown."

Coroners may also fail to consider the true cause of death when it coincides with an automobile accident. An insect sting can cause a severe reaction and loss of consciousness in a driver. Indeed, some deaths have been inaccurately ascribed to traffic accidents when actually they were the result of insect stings.

The stings of the Hymenoptera (bees, wasps, ants, etc.) may produce a variety of symptoms, depending chiefly upon the amount of venom injected, the presence or

absence of sensitivity, and to a less extent, the sting site.

A single sting may cause only minor discomfort or, in a very sensitive patient, death. Symptoms may subside in a few hours or persist for several days. They may occur within seconds or minutes of the sting or reappear after several days have elapsed.

Most reactions to stings can be classified as normal, toxic, or generalized. The *normal reaction* occurs within a few minutes of the sting, when usually a small red area appears at the sting site. This becomes surrounded by a whitish colored area and beyond that a reddish flare. A wheal will form then usually subside within a few hours, leaving irritation, itching and heat. All symptoms usually disappear within a few hours.

Toxic reactions usually follow multiple stings. The principal symptoms are gastrointestinal—diarrhea and vomiting, faintness and unconsciousness. These manifestations are accompanied by edema (without urticaria), headache, fever, drowsiness, involuntary muscle spasm, and sometimes even convulsions. Recovery may follow massive reactions, but death is not unusual. It has been estimated that about 500 stings during a short period will be lethal.

Generalized allergic reactions produce a variety of symptoms. These reactions may first be indicated by a dry, hacking cough, a sense of constriction of the throat or chest, itching and swelling about the eyes, urticaria, sneezing and wheezing, a fall in blood pressure, and a rapid pulse. These symptoms usually appear within two or three minutes following the sting.

The more severe reactions consist of one or more of the following: constriction of the throat or chest, dyspnea, asthma, abdominal cramps, nausea, cyanosis, chills and fever, vertigo, and shock.

Treatment

Application of ice packs may reduce the duration and intensity of swelling in a local reaction. It is important to avoid heat. If the sting involves an extremity, rest and elevation of the limb are indicated. Antihistamines are of little value in local reactions,

as the primary cause is not histamine-release. However, should urticaria be present around the sting site, oral antihistamines may relieve the itching and some of the local swelling.

Embedded stings should be removed as promptly as possible by scraping the site with a fingernail or knife blade. The area should be thoroughly cleaned. Analgesics may be necessary for pain, and if the patient is extremely restless, sedatives may be given orally.

Generalized reactions may range from a few urticarial lesions to generalized angioedema or from syncope to shock. Thus the treatment must be administered accordingly.

Milder symptoms can be relieved by the use of ephedrine or an epinephrine inhaler.

An oral antihistamine is also recommended. In the presence of a severe reaction, a 1:1000 solution of aqueous epinephrine in a dose of 0.3 ml to 0.5 ml for adults (0.2 to 0.3 ml for children) should be given by deep subcutaneous injection and the site massaged vigorously to speed the rate of absorption. These patients should be closely observed, since the response will determine whether the dose should be repeated in 20 minutes or so.

Steroids may be helpful. The administration of oxygen will minimize the development of hypoxia with severe reactions. Aramine or Livophed may be given. Occasionally plasma expanders may be required to maintain adequate blood volume and cardiac output.

Comprehensive Stroke Program of North Carolina

B. LIONEL TRUSCOTT, M.D., PH.D.* MARGARET KELLER, R.N., M.P.H.**

†RACHEL L. NUNLEY, R.P.T., M.A., AND ‡WILLIAM S. LEINBACH

During 1969 ten local stroke programs were started in North Carolina, six in June and four in November. These communities are the first in the nation to combine their talents and facilities in a team approach to the delivery of the highest quality of comprehensive care to all stroke patients and stroke-prone individuals. This care and interest does not end with discharge from the hospital, but rather continues in a systematic follow-up made possible by the combined efforts of all community health workers.

Far-reaching implications of this program are: (1) improvement in the health delivery system through the coordinated efforts of all

deliverers of health care in the community; (2) increased manpower through in-service, patient-family, and public education; (3) decreased cost of stroke care as a result of a shorter hospital stay and early involvement of the family in post-hospital rehabilitation of the patient; and (4) lesser demands on the physician's time and on hospital facilities as improved care and continued follow-up tend to abort recurrent physical and mental complications.

The North Carolina Regional Medical Program, already active in the field of heart disease, cancer, and related diseases, submitted a proposal to establish a Comprehensive Stroke Program which, in the late spring of 1968, was approved and funded by the Division of Regional Medical Programs. In general outline, the objective of this proposal was to help communities throughout the state to offer "the right care, in the right place, at the right time, to all actual and potential stroke individuals."

All concerned with this proposal were aware that North Carolina ranks among the highest states in the country with respect to

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stroke deaths, but among the lowest in the number of health workers, who, furthermore, are largely concentrated in regions containing only 25% of the population. A basic issue was whether these few and poorly distributed deliverers of health care could make available a high quality of comprehensive care to a larger number of stroke patients. Possible solutions to this problem were (1) coordination and better utilization of community resources; (2) continuing education and training of community physicians, nurses, and physical therapists in the diagnosis and treatment of stroke; and (3) use of this knowledge to train non-professionals, patients, and their families in rehabilitative techniques which should not require the limited time and extensive training of highly skilled professionals.

To transform the concept of such a program into a practical, operational project, numerous resource personnel and agencies were consulted: the North Carolina Heart Association, representatives of the State Medical Society, State Nurses' Association, State Physical Therapy Association, and the State Board of Health; the three medical centers, practicing physicians, and many others.

Nature and Scope of the Program

The staff of the comprehensive Stroke Program furnishes each community with guidelines covering administrative, organizational, educational, and other matters which will best support the community in implementing its program. In all phases of the program, the staff works closely with the key personnel in the community to adapt and modify these guidelines to the resources and needs of the individual community. Feedback of the data originated by the program permits the community to determine the efficacy of its program and modifications which might benefit it. The cooperative and organized effort of all deliverers of health care in the community, together with the supportive services of the Comprehensive Stroke Program, should relieve the physician from the time-consuming task of coordinating and supervising all professional and non-professional aspects of stroke care.

The Meaning of "Comprehensive" Stroke Care

To obtain the high quality of comprehensive stroke care implied in an effective local stroke program, the stroke patient will receive:

1. Early and accurate diagnosis
2. Early and intensive treatment
3. Early discharge planning and discharge
4. Continued follow-up.

Fulfillment of these aims requires intensive training and continuing education of community stroke teams in all aspects of differential diagnosis, diagnostic techniques, and rehabilitative procedures, and a systematized plan to ensure that each patient will be discharged as soon as possible and receive follow-up care as long as necessary.

Establishment of a Local Stroke Program

a) *Exploratory phase:* The interest and involvement of community physicians is essential to the establishment of a local stroke program. Without this ingredient, and regardless of the interest of all other deliverers of health care, no stroke program can be implemented. The first step, therefore, is the expression of interest by a key physician or physicians with whom the director and assistant director of the Comprehensive Stroke Program meet to outline the objectives, the ways by which the objective might be attained, and the role of community personnel in implementing the program.

If the physician or physicians believe that such a program would be desirable and of interest to the community, an *ad hoc* steering committee is appointed, consisting of those individuals whose coordinated efforts are essential. These members are the hospital physician, nurse, physical therapist, and administrator; the public health nurse, representatives of the Departments of Public Health and Welfare, of nursing homes and extended care facilities; social worker, medical records librarian, and other personnel deemed necessary and available. The director, education coordinator, and assistant director of the stroke staff meet with this committee to discuss the program in sufficient depth to permit these individ-

Table 1
Local Stroke Programs

Community Hospital	County	Stroke Coordinators
1. Ashe County Memorial	Ashe	Roy O. Freeman, M.D. C. E. Miller, M.D.
2. Catawba Memorial	Catawba	Henry W. Abernethy, M.D. Carter A. Sinclair, M.D.
3. Richard Baker		
4. Hickory Memorial		
5. Northern Hospital of Surry County	Surry	Carlton D. Everhart, M.D.
6. Maria Parham	Vance	Millard W. Wester, Jr. M.D.
7. Craven County	Craven	Lawrence H. Erdman, M.D.
8. Roanoke Rapids	Halifax	F. L. Fussell, Jr., M.D.
9. Cape Fear Valley Hospital Unit	Cumberland	Horace W. Miller, Jr., M.D.
10. Highsmith-Rainey Memorial	Cumberland	

uals to determine whether the community will participate in establishing a local stroke program.

2. *Preoperational phase:* A local stroke program committee is formed, the members of which represent the activities represented in the Steering Committee. Four subcommittees are appointed: Discharge planning, area resource development, public education and in-service education. The latter consists of the stroke team (hospital physician, nurse, and physical therapist, and public health nurse), which attends an intensive four-day basic training course in the diagnosis and treatment of stroke. Each member is furnished printed guidelines and pertinent literature covering all aspects of acute and continued management of the patient. This training and the materials are provided without cost to the community or to the individual participants.

c) *Operational phase.* The stroke team returns to the community and conducts in-service education and patient-family education according to a schedule and abstracted materials outlined by the stroke staff; necessary films and training materials are loaned to each community for this purpose.

Additional support to the local stroke program. The many activities of an effective program imply coordination and organization which should not make demands on the time and effort of the highly skilled professionals. These coordinating activities are the responsibility of an executive secretary, who is employed on a part-time basis by the Comprehensive Stroke Program and who resides in the community. This secretary further ensures that the hospitalization and

follow-up data permit all participants to evaluate the continuity and effectiveness of the program. Stroke consultation services by trained neurologists are made available at no cost to the community. These services may take the form of consultation by telephone or in person, consideration of problem cases, or any other way in which the community can receive the most meaningful support.

The stroke teams of all operational communities attend an annual workshop to consider how problems can be or have been resolved, to suggest ways in which the stroke staff can best help the community, and to be brought up to date on the most recent advances in diagnosis and treatment of stroke.

Conclusion

These community-centered, community-implemented, local stroke programs are voluntary, team efforts to offer stroke patients the highest quality of comprehensive and continued care. In addition to improvement in the health delivery system, the shorter hospital stay and increased chance of earlier and greater recovery holds promise of considerable savings in the multi-million dollar stroke problem in the State.

A major partner in this program is the North Carolina Heart Association, represented by Mr. William S. Leinbach (co-author), Mr. W. James Logan (Executive Director), and Miss Gerrienne Fife (Assistant Executive Director). Contributing greatly to the development of the program were: Miss Lydia Holley, R.P.T., M.P.H., Miss Audrey Booth, R.N., M.N., M.S.N. (both of the North Carolina Regional Medical Program and the University of North Carolina), and Miss Marjory Johnson, B.S., M.A., Assistant Professor, School of Medicine, University of North Carolina.

Monthly Perinatal Mortality Report

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹; NORTH CAROLINA, DECEMBER 1969 AND MOST RECENT 12-MONTH TOTALS

County	WHITE				NONWHITE				County	WHITE				NONWHITE			
	Perinatal Deaths		Total Deliveries Jan. 1969 - Dec. 1969	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Jan. 1969 - Dec. 1969	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries Jan. 1969 - Dec. 1969	Perinatal Rate Per 1,000 Deliveries				
	December 1969	January 1969 - December 1969			December 1969	January 1969 - December 1969				December 1969	January 1969 - December 1969						
NORTH CAROLINA	161	1840	67407	28.0	101	1327	24091	41.1									
ALAMANCE	5	34	1325	25.7	4	44	496	22.0	PENDER	7	128	24.7	2	5	138	36.2	
ALEXANDER	1	15	320	46.9	1	1	30	3.3	PERQUIMANS	6	63	11.1	2	2	52	3.8	
ALLEGHANY	3	137	-	-	-	-	-	-	PERSON	10	264	27.7	9	203	44.7	44.7	
ANSON	4	158	-	-	2	15	210	7.1	PITT	2	20	746	26.9	2	36	691	57.1
ASHE	1	6	329	18.2	-	-	-	-	POLK	2	2	118	-	1	3	32	-
AVERY	9	237	26.0	-	-	-	-	-	RANDOLPH	4	30	1241	14.2	4	152	-	-
BEAUFORT	11	390	18.1	-	10	247	40.0	-	RICHMOND	5	18	461	29.4	2	18	301	28.8
BERTIE	7	92	-	-	1	14	269	5.2	ROBESON	20	267	24.3	2	29	1376	45.3	
BLADEN	4	229	-	-	1	11	216	5.1	ROCKINGHAM	1	39	969	20.1	2	18	406	44.7
BRUNSWICK	10	261	28.3	-	5	160	23.7	-	ROWAN	27	1125	14.1	2	16	310	31.0	
BUNCOMBE	3	59	2083	28.3	1	11	265	41.5	RUTHERFORD	1	16	761	21.1	2	12	136	88.0
BURKE	4	31	767	20.1	3	95	-	-	SAMPSON	1	11	381	14.8	1	21	318	66.0
CABARRUS	3	30	1045	28.7	14	162	28.4	-	SCOTLAND	1	15	304	29.7	1	13	288	46.1
CALDWELL	4	41	1147	35.7	1	7	48	-	STANLY	1	21	279	20.8	1	1	159	-
CAMDEN	3	53	-	-	1	1	32	-	STOKES	1	13	363	47.9	1	1	38	-
CARTERET	16	528	29.1	-	2	70	-	-	SURRY	3	36	911	29.3	1	7	61	-
CASWELL	1	3	131	-	1	12	167	71.9	SWAIN	2	103	-	1	1	66	-	
CATAWBA	7	40	1528	26.2	1	8	224	29.9	TRANSYLVANIA	1	13	301	43.2	1	25	-	-
CHATHAM	3	3	300	-	8	173	46.0	-	TYRRELL	3	33	-	2	30	-	-	
CHEROKEE	1	5	308	16.2	3	12	-	-	UNION	17	703	24.1	1	9	262	33.9	
CHOWAN	1	88	-	-	4	86	-	-	VANCE	6	324	19.5	2	25	390	64.7	
CLAY	1	4	89	-	1	1	57.1	-	WAKE	6	70	3049	12.1	1	57	1158	49.7
CLEVELAND	1	24	979	24.6	3	24	420	57.1	WARREN	2	5	53	-	6	124	39.0	
COLUMBUS	2	14	501	2.8	6	18	332	54.8	WASHINGTON	5	132	27.9	10	165	60.6	-	
CRAVEN	1	32	1206	26.5	21	380	66.8	-	WATAUGA	14	379	36.8	4	-	-	-	
CUMBERLAND	8	105	3725	28.2	6	67	1369	49.0	WAYNE	2	21	1106	19.0	3	35	557	62.8
CURRITUCK	1	1	56	-	1	2	31	-	WILKES	2	24	822	29.2	-	57	-	-
DARE	1	1	110	-	1	1	-	-	WILSON	3	19	543	21.0	1	26	597	43.6
DAVISON	3	47	1457	27.3	1	11	244	45.1	YADKIN	7	349	20.1	2	31	-	-	
DAVIE	5	281	21.8	-	1	5	68	-	YANCEY	6	206	29.1	6	-	-	-	
DOPLIN	8	378	21.0	-	3	15	298	50.3									
DURHAM	6	33	1457	22.6	6	38	953	39.9	CITIES				City totals are also included in county totals				
EDGECOMBE	2	9	416	21.6	3	25	547	45.7	ALHEMARLE	2	140	-	1	47	-	-	
FORSYTH	7	90	2799	32.0	6	60	1163	51.3	ASHEVILLE	22	715	20.8	1	9	226	39.8	
FRANKLIN	6	182	33.0	-	1	11	201	40.1	BURLINGTON	1	11	963	12.9	3	9	140	64.3
GASTON	12	69	2440	28.3	27	475	60.8	-	CHAPEL HILL	5	317	18.8	3	81	-	-	
GATES	1	41	-	-	1	6	84	-	CHARLOTTE	6	75	3156	27.8	7	31	1950	41.5
GRAHAM	1	101	-	-	13	-	-	-	CONCORD	1	8	212	27.7	9	102	88.0	-
GRANVILLE	1	7	238	29.4	3	14	355	39.1	DURHAM	4	21	934	22.8	6	35	834	45.0
GREENE	3	96	-	-	1	7	143	47.5	EDEN	5	235	21.2	3	67	-	-	
GUILFORD	5	108	3883	27.8	2	72	1599	45.0	ELIZABETH CITY	2	162	-	3	91	-	-	
HALIFAX	1	8	410	19.5	2	24	595	40.8	FAYETTEVILLE	3	32	1000	31.0	4	35	606	57.6
HARNETT	18	531	33.9	-	1	13	319	40.9	GASTONIA	4	26	615	31.9	2	10	195	51.7
HAYWOOD	4	21	675	21.1	1	15	-	-	GOLOSBOURG	6	327	15.3	2	19	295	74.6	
HENDERSON	3	26	689	27.7	1	46	-	-	GREENSBORO	3	51	1857	27.5	2	41	936	43.6
HERTFORD	8	134	68.7	-	21	261	80.5	-	GREENVILLE	1	11	535	21.8	1	8	200	40.0
Hoke	2	111	-	-	4	221	-	-	HENDERSON	3	125	-	1	10	156	64.1	
HYDE	2	42	-	-	4	39	-	-	HICKORY	1	12	346	34.5	1	4	101	-
IREDELL	3	28	937	29.9	14	311	45.0	-	HIGH POINT	1	27	619	33.0	17	429	39.6	-
JACKSON	1	7	292	24.0	1	65	-	-	JACKSONVILLE	1	10	411	24.3	3	28	-	-
JOHNSTON	1	21	753	27.8	1	17	324	52.6	KINSTON	4	295	-	5	235	21.3	-	
JONES	1	66	-	-	1	72	-	-	LENOIR	5	225	20.0	1	4	52	-	-
LEE	3	369	-	-	6	166	36.1	-	LEXINGTON	10	265	27.7	1	5	89	-	-
LENOIR	11	612	18.0	-	14	431	32.8	-	LUMBERTON	3	202	-	10	190	59.6	-	
LINCOLN	1	15	545	2.7	1	6	97	-	MOORE	4	131	-	4	65	-	-	
MCDOWELL	3	19	530	35.8	1	3	36	-	NEW BERN	5	171	29.0	5	130	38.5	-	
MACON	1	5	211	23.7	1	3	-	-	RALEIGH	1	40	1613	24.8	34	591	57.5	-
MADISON	1	8	215	28.1	2	2	-	-	REIDSVILLE	5	166	20.1	4	101	-	-	
MARTIN	1	8	196	40.8	1	16	291	55.7	ROANOKE RAPIDS	5	185	27.0	2	41	-	-	
MECKLENBURG	10	120	47.1	-	7	92	2262	40.7	ROCKY MOUNT E	1	2	111	79.6	2	10	148	67.1
MITCHELL	1	3	200	-	3	-	-	-	ROCKY MOUNT N	3	247	-	1	7	164	51.9	-
MONTGOMERY	7	257	2.7	-	2	9	116	47.0	SALISBURY	3	191	-	7	135	-	-	
MOORE	5	25	474	21.1	1	10	238	42.0	SANFORD	2	159	-	2	74	-	-	
NASH	10	581	24.7	-	2	27	382	44.5	SHELBY	6	193	21.1	6	118	50.9	-	
NEW HANOVER	1	30	1176	25.5	1	15	384	43.6	STATESVILLE	2	10	281	35.6	7	136	51.1	-
NORTHAMPTON	9	64	101	-	9	283	31.8	-	THOMASVILLE	1	9	190	47.4	5	94	-	-
ONSLow	1	19	872	21.7	1	21	438	47.9	WILMINGTON	1	15	574	28.1	1	10	313	31.9
ORANGE	1	3	90	-	3	59	-	-	WILSON	10	291	24.9	15	280	58.6	-	
PASQUOTANK	7	291	24.1	-	6	176	44.3	-	WINSTON SALEM	6	50	1466	34.1	6	57	1111	51.3

¹Perinatal Death Rate = $\frac{\text{Fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

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MARCH, 1970

TEMPEST IN THE CHICKENPOT

Public press stories of the most diverse aspects of science progress are usually of much popular interest, particularly when they are concerned with major aspects of health and disease in man. Attracting special attention have been continual and generally sensational accounts pertaining to a variety of factors potentially contributing to the induction of human cancer. That most of the reports are premature and without lasting significance is not often noted, nor are ill based opinions corrected. Many people have good cause to remember the

cranberry scares and the more recent stir about cyclamates. Although the cranberry report was ruinous to many growers, little effort was made to point out that consumption of about 15,000 pounds of cranberries per day would be necessary to equal the dose of pesticide causing cancer in animals.

The newest articles of comparable character in this respect described purported radical changes in the standards of inspection of chickens in preparation for the food market. It was implied, if not actually stated, that the regulations were to be altered to permit the use of birds bearing leukosis virus with the air that such was not formerly allowed. Most extreme was the alleged suggestion that tumor material would be employed in some forms of food for man.

Although these articles are not without factual basis in some respects, presentation was so directioned and slanted as to give the impression that the problem of avian leukosis and the discussed standards of inspection and condemnation are something entirely new. "Cancer virus chickens recommended for mart," asserts one headline, just as if use of birds bearing virus was being advocated as of some special advantages as food. The truth of the matter in the full context, however, is quite different from inferences which might be drawn from the scanty report. In the first place the article had no official basis whatever but instead reported only "opinions" of some scientists and others of the significance of leukosis in its bearing on the poultry market. The lack of meaningful grounds for the reports has already been shown by the official announcements of the Secretary of Agriculture appearing in the press of February 6, 1970. These, together with comments by the Surgeon General, stated emphatically that no changes would be made in the presently very strict poultry inspection standards.

It is true that leukosis virus does occur in many chickens, tested in the total chicken population. A relatively small proportion such birds reaching the poultry abattoir exhibit visible lesions of variable size, sometimes in internal organs but also in the skin, resulting in rigid condemnation of the ani-

mal. In the absence of lesions, however, virus can not be detected except by special and highly expensive laboratory procedures completely impractical in chicken marketing with present knowledge. In consequence, it would be impossible, even if desirable, to recognize and discard those birds which may harbor virus without lesions. It is certain, however, that deliberate marketing of chicken tumors as any form of human food has not been even discussed, much less permitted or advocated.

The recent newspaper accounts represent nothing more than a public airing of some of the enduring frustrations confounding the problems of all those concerned with the poultry market, including agriculture officials, the poultry industry and scientists working with leukosis. Leukosis has taken an enormous economic toll borne finally through the years by the consumer. No effort or money has been spared to eradicate the condition, and the current reports have been the outcome of continuing conferences for the purpose of defining inspection standards guaranteeing chicken products of optimum quality compatible with practical costs to the consumer. It is noteworthy, further, that these problems are by no means unique to the chicken but are shared by hogs, cattle and all other meat animals which likewise harbor viruses causing tumors which in no way endanger the health of man.

Finally, it should be emphasized that leukosis virus even if present in the chicken would be in infinitesimal amounts, and all evidence gained by intensive investigations for many years indicates that it is completely non-infectious for man. The report that an investigator had produced tumors in monkeys with "leukosis" virus is entirely in error. His virus was the Carr-Zilber strain, an essentially artificial avian tumor agent derived through many laboratory passages in the past 60 years from Rous sarcoma virus, first isolated at the Rockefeller Institute in 1909. Despite many efforts since then, no leukosis virus or agent now extant in the chicken population has ever been found to produce any disease in any animal except birds.

A recently developed vaccine against the prevalent form of leukosis designated in the news articles as Marek's disease bids fair to reduce consideration of the problem to academic rather than practical interest. The vaccine of a character practical for economical production and field application provides 100 percent protection against Marek's disease virus in the laboratory and has been highly effective in field trials. In consequence there is good reason to expect rapid eradication of the Marek aspect of leukosis.

JOSEPH W. BEARD, M.D.

* * *

OUR RUSSIAN FRIENDS RETURN

Back in 1965 the JOURNAL published a paper on psoriasis by a Russian authority. In our editorial accompaniment we said the primary reason for publishing the paper was to give our readers insight into the way a physician in the USSR considered this common skin problem. Once again the Soviet Embassy has sent us an "exclusive"—a paper originally prepared for a somewhat conservative Soviet literary magazine named *October*. The author is described as a physician and a "man of letters." This time the paper is of general interest, and in some of the paragraphs one can easily identify with Diagylev's complaints. In others, the difference between our system of medicine and that in the USSR is quite apparent. The differences between practitioners with and without degrees are mentioned, for example—how soon will this sort of thing appear in our contemporary practice as people in the allied health sciences get more and more into patient care?

Of some surprise is the mention of the problems caused by "free" medical care, and the suggestion contained in the article that it might be well to charge tuition in the medical schools, and to set up geriatric facilities which would make charges for their services. It seems that money not only has the corrupting influence which seems to be a chief target of the Soviets, but has some purifying influences that they probably hate to admit.

THE NORTH CAROLINA DIABETES ASSOCIATION

The emergence of still another specific disease-oriented voluntary health agency will be greeted by most of the profession with, at best, a resigned groan. The North Carolina Diabetes Association, which celebrates its third anniversary with a Scientific Symposium in Winston-Salem on April 3, 1970 does have certain features to distinguish it from some of its contemporaries. For example, it concerns itself with a disease that really is common. Diabetes is now the third leading cause of blindness and the seventh leading cause of death in the United States, affects approximately one in fifty adults, and provides an important percentage of the victims of coronary heart disease and stroke.

As in so many other disorders, the "cure" for diabetes awaits future basic research, but right now it is possible to do something very useful for the diabetic.

Diabetic education takes the cheerful view that the man who will eat a well-balanced diet, inject insulin daily, and daily observe his urine sugar and acetone responses in order to appropriately adjust his insulin can lead a long and healthful life. The North Carolina Diabetes Association aims to teach, not to frighten. Its poster girl is a happy, healthy child frolicking at summer camp.

On the other side of the coin is the growing tendency among experts in the health field to view health service delivery as a total problem, rather than to concentrate efforts on one disease at a time. The fragmentary and conflicting divisions in responsibility for health services serve only to augment this trend. In the field of diabetes alone in North Carolina there have been at least four major agencies concerned: the Public Health department, the health arm of the United Funds, the federal government through its Regional Medical Program, and the physician—patient—public through the voluntary North Carolina Diabetes Association. Rather than insert one more health organization into the tedious hurly-burly of door-to-door fund raising, the ambitious

program in patient education of the Association proposes to draw all of these disparate entities into one organized and coherent approach. Not yet ready to meet the ideal of complete health services to the "whole man," the North Carolina Diabetes Association is, at least, undertaking complete diabetes educational service to the whole diabetic.

EMERY C. MILLER, M.D.

* * *

LIFE CAN BE DIFFICULT

In the February 15, 1970 edition of "The Citation," a medicolegal digest prepared in the office of the general counsel of the AMA, there is reference to a case of the sort that makes physicians pale and wonder how to get up enough nerve and insurance to practice medicine. A doctor in Arizona took a mole off a patient's neck and sent it to the pathology laboratory. The report said "an occasional mitotic figure was seen and there was no definite evidence of malignancy." An expert medical witness testified that the report was ambiguous and would have led him to question whether or not there was malignancy. The physician told the patient to see him or some other doctor if there was evidence of activity in the area of the mole. Evidence was presented to show that such a cautionary statement was not normal practice in cases where there is no doubt of the benign nature of a growth. Thirteen months later the patient came to see the physician again, for confirmation of her fifth pregnancy and to have a lump behind her ear treated; the lump was near the site of the mole. Four months later the lump had grown to the size of a golf ball and a surgeon removed an extensive cancerous growth. Three months later the patient was dead of malignant melanoma.

The original suit had been dismissed by a trial court, but the Arizona Supreme Court ruled that there was sufficient evidence on material grounds to justify trial for negligence. The Supreme Court did not agree with the patient's survivor that the physician's negligence was so apparent as to render expert medical testimony unnecessary. It did feel that the pathology report

might have been ambiguous enough to cause the physician to take further steps to establish a diagnosis. It also felt that there was room for argument concerning whether or not the patient's life could have been saved or extended had the diagnosis of malignant melanoma been made the first time the patient was seen with the lesion.

With nothing but a summary to go on it is probably precarious to speculate on the total situation. However, it is apparent that the Arizona Supreme Court holds the primary physician to be responsible for interpreting doubtful information obtained from a consultant. Yet every physician knows that there are many instances in which no type of examination produces unequivocal results, no certainty on which a clearcut, un-

assailable course of action can be based. Surely this situation can be brought out in a court of law as well as in medical circles. Perhaps what is necessary is that medical records include material which clearly states that various uncertainties were recognized, and considered, and that the action (or inaction) undertaken is done so with knowledge of these problems, and according to the best judgment and advice available. More than that no one can expect at any time in the foreseeable future. It is understandable how the family of the dead lady in Arizona must feel. Perhaps what would be most comforting to them to know is that everything had been done which would likely have helped; that would mean more to them over the years than a legal victory.

Correspondence

POULTRY INSPECTION AND AVIAN LEUKOSIS

To the Editor:

The American consumer has for years been consuming poultry and poultry products which contained the leukosis complex virus. Federal poultry inspection regulations condemn only those carcasses which have visible evidence of avian leukosis. So the point in question is not whether poultry products infected with leukosis virus should be placed on the consumer market, but rather should industry be allowed to hide or disguise poultry carcasses or parts which have visible evidence of disease, namely avian leukosis. From the human health standpoint, there is apparently no greater risk from consuming visibly leukotic poultry carcasses than from consuming non-visibly leukotic poultry carcasses. Therefore, from the viewpoint of conserving edible protein such a practice may be justifiable.

Our meat and poultry inspection service, either state or federal, does not guarantee a

disease-free carcass or product. It does, however, guarantee that the product was processed under a given set of sanitary regulations, handled in an acceptable manner, stored in a reasonable way so as to protect it against contamination and spoilage, and labeled as to the truth of content. Thus the resulting product is labeled wholesome and considered acceptable to the consumer.

It doesn't seem reasonable to expect the American consumer to esthetically accept a product that contains "chicken tumors." The struggle to provide meat and poultry products of high quality to the consumer market has been long and hard. To include visibly leukotic carcasses and parts in processed food would be a step in a backward direction.

DR. JOHN I. FREEMAN, Chief, Veterinary
Public Health Section, Division of
Epidemiology

DR. MARTIN P. HINES, Director,
Division of Epidemiology,
State Health Department

PROGRAM

Preliminary

PROGRAM

One Hundred Sixteenth Annual Session

The Medical Society of the
State of North Carolina

Headquarters: THE CAROLINA

Pinehurst, North Carolina

Saturday, May 16, 1970

9:00 a.m.

EXECUTIVE COUNCIL Meeting

(Business of this Session may be continued Sunday
morning at 10:00 o'clock)

(Crystal Room—The Carolina)

10:00 a.m.

REGISTRATION DESK opens—(Front Lobby)

(Society Members, Delegates, Officials, Auxiliary,
Technical and Scientific Exhibitors and Guests will
register in this Area.) Registration closes at 5:00 p.m.

2:00 p.m.

SECTION ON RADIOLOGY

(Pine Room—The Carolina)

Ernest B. Spangler, M.D., Chairman, Greensboro

CALL TO ORDER: Richard G. Lester, M.D., Durham

2:05-2:20 p.m.

POST MORTEM X-RAY EXAMINATIONS

Robert N. Wilcox, M.D., Lenoir

2:25-2:40 p.m.

PHOTOGRAPHY IN AN X-RAY DEPARTMENT

Morris A. Jones, Jr., M.D., Durham

2:45-3:00 p.m.

RADIATION PROTECTIONS AND REGULATIONS

Finley Watts, B.S.

3:05-3:20 p.m.

SILVER RECOVERY

Ernest B. Spangler, M.D., Greensboro

3:30-3:45 p.m.

COFFEE BREAK

MINI-COURSES

3:45-4:30 p.m.

No. 1 SCANNING IN A COMMUNITY HOSPITAL

C. Douglas Maynard, M.D., Winston-Salem

3:45-4:30 p.m.

No. 2 DIFFERENTIAL DIAGNOSTIC PATTERNS that
will include 90% of Bone Lesions in a Community
Hospital

Donald M. Monson, M.D., Durham

4:45-5:30 p.m.

BUSINESS MEETING

Presiding: Richard G. Lester, M.D.

5:30-6:30 p.m.

Social

Sunday, May 17, 1970

10:00 a.m.

General Registration opens—(Front Lobby)

10:00 a.m.

North Carolina Academy of General Practice

Board of Directors Meeting

(Camellia Room—The Carolina)

2:00 p.m.

First Meeting of the Annual Meeting

THE HOUSE OF DELEGATES of the Medical Society
(Cardinal Ballroom—The Carolina)

James E. Davis, M.D., Speaker, presiding

MEMORIAL SERVICES

Dan Currie, M.D., Fayetteville

Co-Chairman, Committee on Necrology, presiding

HOUSE OF DELEGATES—BUSINESS SESSION

(Agenda will be available)

5:00 p.m.

Registration Desk closes.

6:00 p.m.

HOUSE OF DELEGATES recesses to Monday, May 18,
1970 (If business of First Meeting is not concluded)

Monday, May 18, 1970

8:30 a.m.

General Registration opens—(Front Lobby)

8:30 a.m.

Exhibits open: Scientific Exhibits—(South Room)

Technical Exhibits—(Exhibition Hall)

9:00 a.m.

NORTH CAROLINA BOARD OF MEDICAL
EXAMINERS

(Meet for Business and Hearings)

(Camellia Room—The Carolina)

POSTGRADUATE AUDIO-VISUAL PROGRAM

John C. Grier, Jr., M.D., Chairman, Pinehurst

MORNING SESSION—(Azalea Room—The Carolina)

Moderator: Thornton R. Cleek, M.D., Asheboro

9:00 a.m.

HYPOTONIC DUODENOGRAPHY

Radiologic method for demonstrating the duodenum, distended and quiet. Spectacular visualization. Safe, simple, effective. The technique, indications, and results.

9:20 a.m.

THE APPEAL OF MEDICINE

Illustrates many of the health career opportunities in medicine. A thought-provoking film. Produced by the Medical Society of the State of North Carolina.

9:55 a.m.

ALDOSTERONE: STORY OF A HORMONE

Presents the research efforts which have written the contemporary history of this hormone.

10:30 a.m.

ALL IT TAKES IS ONCE

Impressive film on private aircraft safety. Attitudes which influence highway safety as well.

11:00 a.m.

BUSY DAY AHEAD

The astronauts' training program—to encourage the average American to think more about a regular program of exercise and fitness.

SECTION ON ANESTHESIOLOGY

Monday, May 18, 1970

(9:00 a.m.-11:00 a.m.)

(Dutch Room—The Carolina)

Thomas H. Irving, M.D., Chairman, Winston-Salem

EPIDURAL ANESTHESIA FOR OBSTETRICS

Franics M. James, III, M.D., Assistant Professor
Department of Anesthesia, Bowman Gray School of
Medicine, Winston-Salem

PAIN

Richard A. Kemp, M.D., Assistant Professor
Dept. of Anesthesia, Bowman Gray School of Medi-
cine, Winston-Salem

RESPIRATORY CARE PROBLEMS

Kermit Tatum, M.D., Co-Director of Respiratory
Care Unit Hospital, University of Pennsylvania,
Philadelphia, Pa.

SECTION ON DERMATOLOGY

Monday, May 18, 1970

9:00 a.m.-11:00 a.m.

(Pine Room—The Carolina)

George W. James, M.D., Chairman, Winston-Salem

IMMUNOFLORESCENCE IN DERMATOLOGY

John R. Haserick, M.D., Professor and Director
Department of Dermatology, Case Western Reserve,
Cleveland, Ohio

PANEL: TREATMENT PROBLEMS OF THE COMMON DERMATOSES

Moderator: John R. Haserick, M.D., Cleveland, Ohio
Panelists: J. Lamar Callaway, M.D., Durham; Charles
M. Howell, Jr., M.D., Winston-Salem; Clayton E.
Wheeler, Jr., M.D., Chapel Hill

CYROTHERAPY OF SKIN TUMORS

Gloria Graham, M.D., Wilson

SECTION ON ORTHOPAEDICS AND TRAUMATOLOGY

Monday, May 18, 1970—9:00 a.m.-11:00 a.m.

(North Room—The Carolina)

J. S. Mitchener, Jr., M.D., Chairman, Laurinburg

9:00-9:25 a.m.

HAND TRAUMA

A. Griswold Bevin, M.D., Chapel Hill

9:25-9:50

FRACTURES AND ASSOCIATED VASCULAR INJURIES

J. Leonard Goldner, M.D., Durham

9:50-10:15 a.m.

FRACTURES OF THE PELVIS

John T. Hayes, M.D., Winston-Salem

10:15-10:40 a.m.

CURRENT MANAGEMENT OF TRAUMATIC SHOCK

Jesse H. Meredith, M.D., Winston-Salem

10:40-11:00 a.m.

FRACTURES OF THE ELBOW AND FOREARM

John L. Wooten, M.D., Greenville

SECTION ON PUBLIC HEALTH AND EDUCATION

Monday, May 18, 1970—9:00 a.m.-11:00 a.m.

(T. V. Lounge—Holly Inn)

Millard B. Bethel, M.D., Chairman, Raleigh

TOWARD A POPULATION PROGRAM FOR NORTH CAROLINA

Trois E. Johnson, M.D., Carolina Population Center, Chapel Hill

USE OF COMPUTER FACILITIES IN LOCAL HEALTH DEPARTMENTS

Stephen Schultz, M.D., Carolina Population Center, Chapel Hill

Election of Officers—

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Monday, May 18, 1970—2:00 p.m.
(Ballroom—Holly Inn)

George M. Cooper, Jr., M.D., Chairman, Raleigh

ALLERGIC COMPONENT REPEATED UPPER RESPIRATORY INFECTION

William Paul Biggers, M.D., Dept. of Otolaryngology, UNC School of Medicine, Chapel Hill

INTENTIONAL OVER CORRECTION OF EXOTROPIA

Arthur C. Chandler, Jr., M.D., Dept. of Ophthalmology, Duke University School of Medicine, Durham

ACULAR EFFECTS OF LASERS

Maurice B. Lander, III, M.D., Dept. of Ophthalmology, Duke University School of Medicine, Durham

COCHLEAR POTENTIALS AT ELEVEN ATMOSPHERES

Hersey Miller, 4th Year Medical Student, Bowman Gray School of Medicine, Winston-Salem

Election of Officers

SECTION ON GENERAL PRACTICE OF MEDICINE

Monday, May 18, 1970—9:00 a.m.-11:00 a.m.
(Cardinal Ballroom—The Carolina)

John P. Harloe, M.D., Chairman, Charlotte

THE DIAGNOSIS AND TREATMENT OF COMMON EYE DISORDERS

M. J. Kreshon, M.D., Charlotte

THE NEUROPHARMACOLOGY OF PARKINSON'S DISEASE—A Report of Clinical Trials with L-DOPA and Amantadine Hydrochloride

Larry A. Pearce, M.D., Dept. of Neurology, Bowman Gray, Winston-Salem

POSTGRADUATE AUDIO-VISUAL PROGRAM

Monday, May 18, 1970

11:30 a.m.-5:00 p.m.

RECOGNITION OF CARDIAC ARRHYTHMIAS IN PATIENT MONITORING

The Tutor Audio-Visual Training System 21 cartridges with voice/data play back (Dutch Room—The Carolina)

FIRST GENERAL SESSION

Monday, May 18, 1970
(Cardinal Ballroom)

11:00 a.m.

CONVENE SESSION: Edgar T. Beddingfield, Jr., M.D., President

Invocation

11:05 a.m.

THE DELIVERY OF HEALTH CARE

Moderator: Eugene A. Stead, Jr., M.D., Duke University Medical Center, Durham

Panelists: Jay M. Arena, M.D., Duke Hospital, Durham

Cecil G. Sheps, M.D., N. C. Memorial Hospital, Chapel Hill

ANNOUNCEMENTS

ADJOURNMENT

Monday, May 18, 1970

— LUNCHEONS —

1:00 p.m.

UNC Medical Alumni Association

Mr. Charles Powell, Chapel Hill, in charge

(East End—Main Dining Room, The Carolina)

SECTION ON STUDENT AMA CHAPTERS (SAMA)

Monday, May 18, 1970—1:30 p.m.

Mr. T. Reed Underhill, Chairman, Chapel Hill

Topic: MEDICAL CARE FROM THE EYES OF THE CONSUMER—Panel Discussion

Moderator: Robert Smith, M.D., Chapel Hill

Participants: Mr. Clyde T. Hardy, Jr., The Bowman Gray School of Medicine, Winston-Salem

Lawrence M. Cutchin, M.D., Tarboro Clinic, Tarboro

Mr. Kenneth G. Beeston, Vice-President, N. C. Blue Cross and Blue Shield, Inc., Chapel Hill

Mrs. Berdine Edwards, L.P.N., N. C. Memorial Hospital, Chapel

Break: 3:15 p.m.-3:30 p.m.

SCIENTIFIC PAPER PRESENTATIONS: 3:30 p.m.-

5:00 p.m.—Two papers from each of the three schools will be presented with a short period for questions and discussion. One of the papers will be selected by three judges to receive an award and scroll. The presentation of this award will be made at the evening banquet.

POSTGRADUATE AUDIO-VISUAL PROGRAM

Monday, May 18, 1970—2:00 p.m.

John C. Grier, Jr., M.D., Chairman, Pinehurst

Afternoon Session: (Azalea Room—The Carolina)

Moderator: William W. Shingleton, M.D., Durham

2:00 p.m.

SUCCESSFUL SEPARATION OF ISCHIOFAGUS TETREPUUS-CONJOINED TWINS

A "surgical spectacular" from the Department of Surgery, School of Medicine, University of North Carolina.

2:25 p.m.

RETURNS FROM SPACE

The effects the aerospace industry is having on our daily lives. Uses of the sight switch. Advanced research for an artificial heart. Clinical studies of pulmonary emphysema. Development of the microscope.

2:55 p.m.

USE OF THE COMPUTER IN CLINICAL CHEMISTRY

Produced at the Duke University Medical Center. Introduction, narration, and discussion by Dr. Robert L. Habig.

3:10 p.m.

EXPERIMENTAL PATIENT MONITORING

The use of the computer in an experimental patient monitoring system in the Pacific Medical Center in San Francisco.

3:25 p.m.

COMPUTERS IN HOSPITAL OPERATION

The use of computers in hospital operations in the Monmouth (N. J.) Medical Center.

3:35 p.m.

EMBOLECTOMY FOR CHRONIC PULMONARY EMBOLISM AND HYPERTENSION

A recent film produced by the Department of Surgery, Duke University Medical Center.

REFERENCE COMMITTEES

Monday, May 18, 1970—2:00 p.m.

REFERENCE COMMITTEE No. I—(Cardinal Ballroom)

REFERENCE COMMITTEE No. II—(TV Lounge)

5:00 p.m.

Registration desk closes.

5:00 p.m.

Exhibits close—(Scientific and Technical)

(Exhibits under supervision of official watchmen)

5:00 p.m.-7:00 p.m.

SOCIAL HOUR & RECEPTION

University of Virginia School of Medicine, Charlottesville, Va. Medical Alumni, former interns, residents are invited.

5:30 p.m.

SOCIAL HOUR—Scientific and Technical Exhibitors

By: Medical Society (Pinehurst Country Club)

Presiding: Josephine E. Newell, M.D., Chairman
Committee on Exhibits

(Admission by Invitation and badge)

6:00 p.m.

Social Hour & Dinner—DUKE MEDICAL ALUMNI
ASSOCIATION (Country Club of North Carolina)

6:00 p.m.-7:00 p.m.

Social Hour—MEDICAL COLLEGE OF SOUTH CAROLINA Medical Alumni Association (Pine Room—The Carolina) Tickets: Miss Ruth Barker

6:30 p.m.

Social Hour and Dinner—Medical College of Virginia Alumni (Crystal Room—The Carolina) (Tickets: Miss Minnie Franck)

Monday, May 18, 1970—7:00 P.M.

MEDPAC BANQUET

(Main Dining Room—The Carolina)

A. Ledyard DeCamp, M.D., Presiding

"IT TAKES MORE THAN AN APPLE A DAY TO
KEEP US AWAY"

Rex Kenyon, M.D., Oklahoma City, Oklahoma
(Member-Council on Legislation, AMA)

STUDENT AMA CHAPTERS DINNER

Monday, May 18, 1970

(Holiday Inn—Southern Pines)

Mr. T. Reed Underhill, Chairman

DINNER MEETING

Invocation:

Introduction of Guests: T. Reed Underhill, Chairman

SPEAKER: Hugh A. Matthews, M.D., Canton, North Carolina

Award for Outstanding Student Paper

9:00 p.m.-1:00 p.m.

DANCING—LEE BOSWELL ORCHESTRA

(Cardinal Ballroom—The Carolina)

(All Members, Auxiliary, Guests, Exhibitors, and
Medical Students are welcomed)

Tuesday, May 19, 1970

8:30 a.m.

Registration opens—(Front Lobby)

8:30 a.m.

EXHIBITS OPEN—Technical Exhibits—(Exhibition
Hall—The Carolina)

Scientific Exhibits—(South Room—The Carolina)

POSTGRADUATE AUDIO-VISUAL PROGRAM

John C. Grier, Jr., M.D., Chairman, Pinehurst

Morning Session: (Azalea Room—The Carolina)

Moderator: Paul McBee Abernethy, M.D., Burlington

9:00 a.m.

X-RAY, ULTRASOUND, AND THERMOGRAPHY IN
DIAGNOSIS

Modern concepts of electronic diagnosis. The ultimate
in diagnosis.

9:30 a.m.**THE PHARMACOLOGY OF DISORDERED SLEEP:
A LABORATORY APPROACH**

General knowledge and hypotheses from several areas of science in an attempt to related drug action and sleep disturbance. A rather profound study.

10:00 a.m.**BAC SI MY**

The activities of volunteer physicians serving in Vietnam.

10:20 a.m.**THE CRITICAL DIMENSION**

An insight into the roles and activities performed by the American Medical Association

10:50 a.m.**EVEN FOR ONE**

The importance of relying on a doctor's judgment as well as on his skill.

11:20 a.m.**PROTEIN METABOLISM IN HEALTH AND DISEASE**

Conversion of dietary protein to amino acids and subsequent synthesis of body proteins. Nitrogen balance, anabolism, and catabolism. Importance of proteins is related to a number of clinical problems.

SECTION ON INTERNAL MEDICINE**Tuesday, May 19, 1970—9:00 a.m.-11:00 a.m.****(Ballroom—Holly Inn)**

William B. Herring, M.D., Chairman, Greensboro

9:00 a.m.**OPENING REMARKS**

Appointment of Nominating Committee

9:10 a.m.**ALCOHOLIC HEPATITIS**

David L. Young, M.D., Assistant Professor of Medicine, Division of Gastroenterology, Duke University Medical Center, Durham

9:40 a.m.**THE AUSTRALIA ANTIGEN: IMPLICATIONS IN THE
PATHOGENESIS OF VIRAL HEPATITIS**

John T. Sessions, M.D., Professor of Medicine, Division of Gastroenterology, University of North Carolina, School of Medicine, Chapel Hill

10:10 a.m.**DRUG REACTIONS INVOLVING THE LIVER**

Harold J. Fallon, M.D., Associate Professor of Medicine, Division of Gastroenterology, University of North Carolina, School of Medicine, Chapel Hill

10:40 a.m.**REPORT OF THE NOMINATING COMMITTEE**

Norman H. Garrett, M.D., Chairman, Greensboro

SECTION ON SURGERY**Tuesday, May 19, 1970—9:00 a.m.-11:00 a.m.****(North Room—The Carolina)**

Marshall G. Morris, M.D., Chairman, Greensboro

ANTIOBIOTICS AND THEIR USE IN SURGERY

Charles Speas Phillips, M.D., Pinehurst Surgical Clinic, Pinehurst

TREATMENT OF TETANUS

W. Chandler Thompson, Jr., M.D., Charlotte

**HYPERBARIC TREATMENT OF GAS GANGRENE
AND OTHER INFECTIONS**

Frank M. Mauney, Jr., M.D., Duke University Medical Center, Durham

SECTION ON PEDIATRICS**and****SECTION ON OBSTETRICS &
GYNECOLOGY****Tuesday, May 19, 1970—9:00 a.m.-11:00 a.m.****(Cardinal Ballroom—The Carolina)**

Robert E. Balsley, M.D., Chairman—(Pediatrics), Reidsville

Luther M. Talbert, M.D., Chairman—(Ob-Gyn) Greensboro

PERINATAL MORTALITY IN NORTH CAROLINA

Moderator: Robert A. Ross, M.D., Chapel Hill

**PERINATAL MORTALITY—PAST, PRESENT AND
FUTURE**

Theodore D. Scurletis, M.D., Raleigh

**FETAL LOSS—THE RESPONSIBILITY AND THE
DILEMMA OF THE PRACTICING OBSTETRICIAN**

H. Fleming Fuller, M.D., Kinston

**PERINATAL MORTALITY—THE VIEW FROM THE
IVORY TOWER**

Robert G. Brame, M.D., Winston-Salem

PERINATAL MORBIDITY—WHAT ARE WE SAVING?

Charles Sheaffer, M.D., Chapel Hill

PANEL DISCUSSION

Moderator: Robert E. Balsley, M.D., Reidsville
Business Session

SECTION ON NEUROLOGY AND PSYCHIATRY

Tuesday, May 19, 1970—9:00 a.m.-11:00 a.m.

(Pine Room—The Carolina)

Robert L. Rollins, Jr., M.D., Chairman, Raleigh

THE HISTORY OF PSYCHIATRY IN NORTH CAROLINA

Moderator: Robert L. Rollins, Jr., M.D., Raleigh

Panel: Robert L. Garrard, M.D., Greensboro

Malcolm D. Kemp, M.D., Pinebluff

Bruce Kyles, M.D., Goldsboro

Hans Lowenbach, M.D., Durham

John McKee, M.D., Raleigh

John F. Owen, M.D., Raleigh

Lloyd J. Thompson, M.D., Chapel Hill

SECTION ON PATHOLOGY

Tuesday, May 19, 1970—9:00 a.m.-11:00 a.m.

(TV Lounge—Holly Inn)

Charles F. Carroll, Jr., M.D., Chairman, Concord

NEUROPATHOLOGY SEMINAR

Moderator: Martin R. Krigman, M.D., Department of
Pathology, University of North Carolina, School of
Medicine, Chapel Hill

Tuesday, May 19, 1970

11:30 a.m.-5:00 p.m.

RECOGNITION OF CARDIAC ARRHYTHMIAS IN PATIENT MONITORING

5:00 p.m.

The Tutor Audio-Visual Training System. 21 cartridges
with voice/data play back
(Dutch Room—The Carolina)

SECOND GENERAL SESSION

Tuesday, May 19, 1970

(Cardinal Ballroom)

11:00 a.m.

CONVENE SESSION—Robert P. Crouch, M.D., First
Vice-President, Asheville, presiding

11:05 a.m.

THE FUTURE OF MEDICINE AND MEDICAL EDUCATION

Moderator: E. Harvey Estes, Jr., M.D., Durham

Panel: John R. Kernodle, M.D., Burlington, AMA
Trustee; William B. Herring, M.D., Greensboro; T.
Reed Underhill, Chairman, Section on SAMA

12:30 p.m.

Annual Address of the President
Edgar T. Beddingfield, Jr., M.D., Wilson
Announcements
ADJOURNMENT

LUNCHEONS

Tuesday, May 19, 1970

1:00 p.m.

Bowman Gray Medical Alumni of Wake Forest College
Mr. Howard Hall, Director, Development & Alumni
Affairs
(Crystal Room—The Carolina)

Tuesday, May 19, 1970

POSTGRADUATE AUDIO-VISUAL PROGRAM

John C. Grier, Jr., M.D., Chairman, Pinehurst
Afternoon Session—(Azalea Room—The Carolina)
Moderator: Robert P. Hadley, M.D., Wilson

2:00 p.m.

PRESCRIPTION FOR LIFE

Emergency heart-lung resuscitation. The ABCD's of
resuscitation—Airway, Breathing, Circulation, De-
finitive treatment.

2:35 p.m.

OLD MAN YOUNG

The opportunities and rewards of retirement.

3:10 p.m.

A LIFE TO SAVE

A woman and her near-fatal experience with a quack
doctor—and how the county medical society and the
AMA brings the quack to justice.

3:45 p.m.

APOLLO 11—FOR ALL MANKIND

Man's first step on a terrestrial body. The trip to the
moon.

SECOND MEETING OF THE HOUSE OF DELEGATES

Tuesday, May 19, 1970—2:30 p.m.

(Cardinal Ballroom—The Carolina)
(Agenda will be available)

5:00 p.m.

Registration closes

5:00 p.m.

Exhibits close

PRESIDENT'S RECEPTION**Tuesday, May 19, 1970—5:30 p.m.**

(Azalea Room—The Carolina)

(By invitation)

PRESIDENT'S DINNER**Tuesday, May 19, 1970—7:00 p.m.**

(Main Dining Room—The Carolina)

BANQUET

Toastmaster: Mr. H. C. Cranford, Jr., Director, Public Relations Division, North Carolina Blue Cross Blue Shield, Inc., Durham

Invocation: Rev. Ray Sparrow, Stantonsburg Methodist Church, Stantonsburg

Presentation of Guests

Presentation of President's Jewel: George W. Paschal, Jr., M.D., Raleigh

Installation of President-Elect Louis deS. Shaffner, M.D., Administration of Oath of Office

Acceptance Address: Louis deS. Shaffner, M.D., Winston-Salem

Announcements

ADJOURN Banquet Session

9:00 p.m.**ENTERTAINMENT**

(Cardinal Ballroom—The Carolina)

STARS of East Carolina Summer Theatre

9:45 p.m.-12 Midnight**GRANDE MARCHE and PRESIDENT'S BALL**

Music by: East Carolina University Jazz Ensemble
(Cardinal Ballroom—The Carolina)

Wednesday, May 20, 1970**7:45 a.m.**

EDITORIAL BOARD Breakfast
NORTH CAROLINA MEDICAL JOURNAL
(Main Dining Room, East End—The Carolina)

9:00 a.m.

Registration opens—(Front Lobby)

9:00 a.m.

Scientific and Technical Exhibits open

THIRD GENERAL SESSION**Wednesday, May 20, 1970**

(Cardinal Ballroom—The Carolina)

9:00 a.m.

CONVENE SESSION: Rose Pully, M.D., 2nd Vice-President, Kinston presiding.

9:00 a.m.

CONJOINT SESSION: North Carolina State Board of Health and Medical Society of State of North Carolina. James S. Raper, M.D., President, Asheville: Jacob Koomen, M.D., State Health Director, Raleigh, reporting.

9:30 a.m.**PRESENTATION OF AWARDS**

F. M. Simmons Patterson, M.D., Chairman, Committee on Awards

Moore, Wake and Gaston County Awards

Exhibitor Award—(Scientific Exhibit)

Medical Student Exhibitor Award—(Scientific Exhibit)

PRESENTATION OF AMA-ERF CHECKS

A. J. Tannebaum, M.D., Chairman, Committee on AMA-ERF

TO: Duke University Medical School

Bowman Gray School of Medicine

UNC School of Medicine

RECOGNITION OF: NURSE OF THE YEAR

Frederick C. Hubbard, M.D., Chairman, Committee of Physicians on Nursing

PRESENTATION OF FIFTY-YEAR CLUB—Certificates and Pins Charles W. Styron, M.D., Secretary

9:45 a.m.**BREAK****10:00 a.m.****THE PHYSICIAN AND THE LAW**

J. Leonard Goldner, M.D., President, Southern Medical Association, Durham

10:30 a.m.**CURRENT TRENDS IN THE SOCIO-ECONOMIC ASPECTS OF HEALTH CARE**

Russell B. Roth, M.D., Speaker, House of Delegates, American Medical Association Erie, Pennsylvania

11:00 a.m.**MAN IN SPACE**

Alan C. Harter, M.D., Chief Launch Site Medical Operations, Kennedy Space Center, NASA, Cape Kennedy, Florida

11:30 a.m.

ADDRESS: Louis deS. Shaffner, M.D., Winston-Salem

12:00 Noon

Installation of Officers elected in 1970 House of Delegates—Edgar T. Beddingfield, M.D., administering Oath

12:00 Noon

Exhibits close.

Registration Desk closes.

12:30 p.m.

PRESENTATION OF PRIZES: Josephine E. Newell, M.D., Chairman Committee on Exhibits, presiding

ADJOURN SINE DIE



When God created man is this what He had in mind?

We doubt it.

People aren't born with those extra rolls around the middle.

They get them by eating too many morning snacks. And afternoon snacks. And midnight snacks.

And then exercising it all off in front of the TV set. Or going around the golf course on an electric cart.

It all starts to add up about the age of twenty-five. And by the time you reach middle-age, your middle-section is the biggest part of you.

What it usually all results in is a fad diet.

And the result is, while you may take off weight, you'll probably add some new health problems, too. It's surprising the number of people on diets who end up with malnutrition.

What's really needed is a good diet prescribed by a doctor, plus the exercise he recommends.

Right now, medical research is working to find more nutritional foods as well as better diets.

And as soon as they find them, you are quick to pass on these discoveries to the community.

North Carolina Blue Cross and Blue Shield is concerned because we serve almost 1.5 million North Carolinians.

We feel it's our job to help you protect their health.

Our prepayment programs and our working relationship with the medical profession allow us to make better health possible for everyone by removing financial barriers.

We don't like to see people eating their hearts out.

We believe there's more to good health than just paying bills.



North Carolina Blue Cross and Blue Shield, Inc.

Medical Society Of The State Of North Carolina

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**\$15,000.00 Major Hospital And Nurses Expense Policy—
80 percent — 20 percent Co-Insurance**

PLAN A—\$100 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 39.50	\$ 99.00	\$138.00
40 - 49	60.00	145.50	185.00
50 - 59	87.50	200.50	240.00
60 - 64*	137.50	307.50	347.00

PLAN B—\$300 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 24.00	\$ 54.50	\$ 72.00
40 - 49	36.50	84.50	102.00
50 - 59	57.00	122.00	139.50
60 - 64*	86.50	193.00	210.50

PLAN C—\$500 DEDUCTIBLE

Age	Member	Member and Spouse	Member, Spouse and Children
Under 40	\$ 15.00	\$ 33.00	\$ 44.00
40 - 49	24.50	57.00	67.50
50 - 59	39.50	87.50	98.00
60 - 64*	66.50	148.00	159.00
65 - 69	27.50	81.50	92.00

*Renewal rates only—When an Insured Member attains Age 65 he may continue to be insured under the \$500 Deductible Plan which is integrated with Medicare.

Semi-annual premium rates are one-half the annual rate plus fifty cents.

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**BENEFITS PAYABLE FROM THE 1ST DAY OF DISABILITY
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Monthly Expense Benefit	Under Age 40 Annual Premium	Ages 40-49 Annual Premium	Ages 50-59 Annual Premium	Ages 60-69* Annual Premium
\$ 400	\$ 40.00	\$ 56.00	\$ 80.00	\$128.00
600	60.00	84.00	120.00	192.00
800	80.00	112.00	160.00	256.00
1,000	100.00	140.00	200.00	320.00
1,200	120.00	168.00	240.00	384.00
1,500	150.00	210.00	300.00	480.00

*Renewal Only. Premiums apply at age of entry and at attained age on renewal.

Semi-annual premium rates are one-half the annual rate plus fifty cents.

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Bulletin Board

COMING MEETINGS

North Carolina Diabetes Association, Third Annual Scientific Symposium—Bowman Gray School of Medicine, Winston-Salem, April 3.

Fifth Annual Wilson Memorial Hospital Symposium: "Recent Advances in the Diagnosis and Management of Cancer—Wilson, April 9.

Statewide Conference on Environmental Health—Elliott Hall Student Center, UNC-Greensboro, April 24-25.

National Conference on Cotton Dust and Health, sponsored by the Occupational Health Section, State Board of Health—White House Inn, Charlotte, May 2.

Medical Society of the State of North Carolina, 116th Annual Session—Pinehurst, May 16-20.

NEW MEMBERS OF THE STATE SOCIETY

Abner Griswold Bevin, Jr., S, Division Plastic Surgery, UNC, Chapel Hill 27514.

William Thomas Trathen, MD, ObG, 3200 Connecticut Ave., Charlotte 28205

Bill Joe Kittrell, MD, Otol, 1057 Van Hoy, Winston-Salem 27103

Kirby Vern Anderson, MD, ObG, 401 S. Green St., Morganton 28655

L. G. Walker, Jr., MD, S, 150 Huntley Place, Charlotte 28207

Edward Everett Landis, Jr., MD, I, 1350 Kings Dr., Charlotte 28207

Christ Alexatos Koconis, MD, OALR, 1350 Kings Dr., Charlotte 28207

John Nichols Beard, MD, PD, 1350 Kings Dr., Charlotte 28207

Gerson Asrael, MD, U, 1350 Kings Drive, Charlotte 28207

Clayton Clewis Dean, MD, S, Box 51AA, Boone 28607

Carroll Roland Bell, MD, Anes, 14 Beechwood Road, Asheville, 28805

Robert A. Gregg, MD, Box 3438 Duke Univ., Durham 27706, RENEWAL

Robert Ogden, MD, Ob, 223 N. Highland, Gastonia 28052

Thomas Stark, MD, Ob, 211 S. Chestnut St., Gastonia 28052

Godofredo Tan Ng., MD, S, 3000 New Bern Ave., Raleigh 27610

William Michael Stephen Nesbit, MD, N, 3924 Suffolk Place, Charlotte 28211

William Hazzard Barnwell, MD, C., UNC School of Medicine, Chapel Hill 27514

Israel David Goldman, MD, N, UNC School of Medicine, Chapel Hill 27514

Tommy Brewer Griffin, MD, D, UNC School of Medicine, Chapel Hill 27514

David Ainsworth Ontjes, MD, I, UNC School of Medicine, Chapel Hill 27514

Robert Smith, MD, GP, UNC School of Medicine, Chapel Hill 27514

Philip Frederick Sparling, MD, UNC School of Medicine, Chapel Hill 27514

Robert Lannes Wood, MD, 102 Dickerson Court, Chapel Hill 27514

Charles Anthony Hoffman MD, U, 903 Hay St., Fayetteville 28304

David Earl Smith, MD, Oph, 214 Manning Drive, Charlotte 28209

John Herndon, III, MD, 155 S. York St., Gastonia 28052

Carroll Lamb Mann, III, MD, Route 1, G

William B. Leach, MD, Path, 2431 S. 17th St., Wilmington 28401

ENVIRONMENTAL HEALTH CONFERENCE

A Statewide conference on environmental health, featuring Sixth District Congressman L. Richardson Preyer and other national, state and local officials, will be held in Greensboro April 24 and 25, it has been announced by officials of the Medical Society of the State of North Carolina.

The conference scheduled for Friday and Saturday, April 24-25, will be held in Cone Ballroom of the Elliott Hall student activity center on the Greensboro campus.

"Environmental Health Problems—Solutions" will be the theme of the program according to Dr. Edward L. Boyette, of Chinquapin, chairman of the sponsoring State Medical Society's Committee on Community Health.

Congressman Preyer will discuss the national viewpoint on the environmental problems on the Friday afternoon program, with other national, state and county level officials also to be heard on the program, says Dr. Boyette.

Students from North Carolina's colleges and high school interested in environmental health are particularly invited to the Saturday morning session, says Dr. Boyette, since that entire segment of the program will be devoted to career opportunities in the environmental health field.

John Morrissey, Executive Director, North Carolina Association of County Commissioners will also appear on the Friday afternoon session.

Dr. Delberth S. Barth of Durham, National Air Pollution Control Administration will discuss Air Pollution on the Friday morning program.

Physicians, county and state officials, allied health representatives and others interested in environmental health are being particularly urged to participate in this statewide conference according to Dr. Boyette.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

The University of North Carolina's vice chancellor for health sciences said recently he hopes the Carolina Population Center will take leadership in planning for an international meeting of faculty and students interested in population problems.

Dr. C. Arden Miller named Lebanon, Egypt, Iran, India and Thailand as the countries where there is increasing academic commitment to studies of popu-

lation growth and as countries which might be interested in such a meeting.

Dr. Miller spoke on the UNC campus about impressions he received as a result of his tour of Middle East and Asian countries this summer under auspices of the Carolina Population Center.

* * *

Friends of Dr. James E. Etheridge, Jr. will be pleased to learn that his resignation from the University of North Carolina School of Medicine was not "for health reasons," as recently reported in these columns. He resigned in order to spend a year in the Clinical Neurophysiology Laboratories of the Mayo Graduate School of Medicine in Rochester, Minn. From there he expects to go to Norfolk, Va., where he has accepted an appointment as Director of Pediatric Neurology and the Clinical Neurophysiology Laboratories for the Norfolk Area Medical Center Authority and the Kings Daughters Children's Hospital.

* * *

Dr. Kermit F. Knudtson recently received a citation and lifetime gold meal ticket from the Dental Foundation of North Carolina.

The award was presented at the 15th annual dental seminar held here on the UNC campus.

A UNC School of Dentistry faculty member since 1953, Dr. Knudtson has been responsible for planning and coordinating each of the 15 annual Foundation seminars and luncheons.

* * *

Dr. Claiborne Poindexter, a prominent Greensboro dentist, recently borrowed a phrase from the youth movement and "told it like it was" at the Fifteenth Annual Dental Seminar at the University of North Carolina.

According to Dr. Poindexter, only 35% of the people in the United States receive regular dental care, and the dental profession (as it is now structured) is ill prepared to treat the other 65%.

He said that ignorance, fear, transportation, initiative, supervision of the young, someone with time to bring them to the office are all part of the reasons why these people have never sought regular dental care.

Dr. Poindexter singled out the ghetto groups as an example.

"Ghetto members lead crisis-ridden lives. In this system, diseases become a concern only when they become an emergency. Such terms as dental care hardly exist in their vocabulary."

Poindexter felt that too often when dentists try to plan some dental health program for these people, they seem to be planning for their own convenience instead of their patients'.

* * *

Dr. William F. Hughes of Chicago, professor of ophthalmology at the University of Illinois and Chairman of the Department of Ophthalmology at Presbyterian-St. Luke's Hospital, delivered the Eighth Dace McPherson Memorial Lecture at the annual staff meeting of the Department of Ophthalmology, University of North Carolina School of Medicine on January 10, 1970.

Forty-two nurses from throughout North Carolina met on the University of North Carolina campus Jan. 12-17 for a short course entitled "Introduction to Public Health Nursing Concepts."

The program was for registered nurses employed to give health care in the community who have not had formal courses in public health nursing.

* * *

Dedication of the new \$10.4 million Ambulatory Patient Care Facility, a major two-part addition to North Carolina Memorial Hospital, was held here Feb. 8 and 9.

The two-day program was divided into a Sunday afternoon dedication program and an all-day Monday scientific session which focused on "The Vertical Patient."

The new facility, which is already in use, houses the J. Spencer Love Clinics in a south addition to the hospital and a surgical suite along with occupational and physical therapy facilities in a north addition.

The J. Spencer Love Clinics are made up of 57 outpatient clinics, 28 of which are conducted each day. Also included in the south addition are the outpatient registration and inpatient admission areas.

The clinic has 164 examination-treatment room (there were only 50 in the old building), emergency services complex, the departments of radiology and radiation therapy, pharmacy, clinical laboratories, immunology, bacteriology, teaching and conference rooms, and patient and personnel food preparation center. One complete floor of the south addition is a clinical research unit to be used initially for research in metabolic diseases.

* * *

Dr. H. Stanley Bennett, Sarah Graham Kenan Professor of Biological and Medical Sciences, recently attended a meeting of the organizing committee for the Third International Conference on Theoretical Physics and Biology in Versailles, France.

Clarence N. Stover, Jr. has been named assistant dean for administration at the University of North Carolina School of Medicine.

In his new position Stover will be responsible for the administrative affairs of the medical school including budgeting, finance, and space needs.

* * *

The means for providing quality health care in North Carolina hospitals will be the focus of a new joint committee formed by the North Carolina Nurses's Association and the North Carolina Society of Hospital Pharmacists.

Co-chairman of the joint committee are Miss Myrtle Barnett, director of nursing at Marion General Hospital, and Fred M. Eckel, Director of the Plan of Pharmacy Assistance at the UNC School of Pharmacy.

Four faculty appointments in the School of Medicine and one in the School of Public Health have been approved by the Board of Trustees of the University of North Carolina. They are:

Clarence Nathan Stover, Jr., assistant dean for administration in the School of Medicine, replacing James R. Turner, resigned; Michael Caplow, associate profes-

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sor of biochemistry; Michael Paul Remler, assistant professor of medicine and anatomy; Florine Kirk Hampton, postdoctoral trainee in the Department of Preventive Medicine; and Allen G. Rosenfield, assistant professor in the Department of Maternal and Child Health, School of Public Health, and in the School of Medicine's Department of Obstetrics and Gynecology.

Two retirements were also announced: Kermit Knudtson, professor and chairman of the Department of Ecology in the School of Dentistry; and A. Hugh Bryan, professor in the School of Public Health.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

A 1969 graduate of the Medical Record Administration Program of the Bowman Gray School of Medicine and North Carolina Baptist Hospital has posted the highest score in the nation on the examination for registration as a medical record librarian.

Mrs. James V. Volk was notified by the American Association of Medical Record Librarians of her achievement as highest scorer among the 229 applicants for registration status.

Shortly after her graduation in August, Mrs. Volk was appointed assistant director of the Medical Record Administration Program, which is operated by the medical center's Division of Allied Health Programs.

Mrs. Volk and her husband, a second-year medical student at Bowman Gray, are from Palos Heights, Ill. Both hold the B.A. degree from Valparaiso University.

* * *

Dr. Richard St. Clair, assistant professor of pathology at the Bowman Gray School of Medicine, has been appointed an Established Investigator of the American Heart Association.

The five-year investigatorship award, which will become effective in July, will enable Dr. St. Clair to concentrate his research on the role of arterial metabolism in the development of atherosclerosis.

The American Heart Association's Established Investigatorship Awards Program is designed to assist outstanding young scientists to become independent investigators in the broad field of cardiovascular function and disease.

Dr. St. Clair's work in atherosclerosis will be done in collaboration with Dr. Hugh B. Lofland Jr., professor of pathology, who will serve as his sponsor in the investigatorship program.

Many factors have been implicated in the development of atherosclerosis. Among these are diet, elevated blood cholesterol, heredity and smoking. But the results of recent studies have led Dr. St. Clair and others to believe that arterial metabolism may play an important role in the development of the disease.

* * *

Dr. Jack M. Rogers, a psychiatrist, and Dr. Ralph W. Barnes, a biomedical engineer, have received ap-

pointments to the faculty of the Bowman Gray School of Medicine.

Dr. Rogers, director of the Division of Psychiatry at Forsyth Memorial Hospital, was appointed assistant professor of psychiatry. He will have responsibilities in the teaching and patient care program of the medical school and North Carolina Baptist Hospital. He also will be involved in the development of a cooperative teaching program in psychiatry now being planned by the medical school and Forsyth Memorial Hospital.

Dr. Rogers holds the B.S. degree from the University of Alabama and the M.D. degree from Bowman Gray. He has been engaged in the practice of psychiatry in Winston-Salem for the past six years.

Dr. Barnes, a former instructor at Duke University was named research instructor in neurology. His primary responsibilities will be in the medical school's sonic laboratory, where he will conduct research on the uses of ultrasonics in the diagnosis of disease.

He holds the B.S.E.E. and Ph.D. degrees from Duke University and the M.S. degree in engineering from the University of Pennsylvania. He took four years of special training in electrical engineering and biomedical engineering at Duke. This work was supported by fellowships from the National Science Foundation and the National Institutes of Health.

* * *

Sam Dizzia of Patterson, N. J., and Michael Perry of Beaver, Pa., both senior medical students at the Bowman Gray School of Medicine, have been awarded Frank R. Lock Foreign Fellowships in Obstetrics and Gynecology.

The fellowships will enable them to take three months of special clinical training in obstetrics and gynecology at Obstetric Hospital, London, England.

The training, which began March 1, is directed by Prof. Renys V. I. Fairweather, director of the Department of Obstetrics and Gynecology at University College Hospital Medical School, University of London.

The Frank R. Lock Foreign Fellowship Program was established two years ago to benefit outstanding Bowman Gray students who have demonstrated exceptional ability and interest in obstetrics and gynecology. Dr. Lock is professor of obstetrics and gynecology who for 25 years was chairman of the that department at Bowman Gray School of Medicine.

* * *

Dr. Bill J. Kittrell, instructor in otolaryngology, has been awarded a grant by the Deafness Research Foundation of New York City to support his studies on the inner ear.

Specifically, Dr. Kittrell is attempting to determine the manner in which the nervous system exerts control over the inner ear.

After approximately three years of research on the electro-physiological responses within the ear, he has evidence that the nervous system affects how the ear hears and what it hears. He now is attempting to determine how and at what point nerve control of the ear takes place.

Dr. Robert H. Coombs, associate professor of sociology, recently was awarded a plaque by the Southern Medical Association for his participation in the association's lectureship series. He was the principal speaker at an honors convocation at the University of Missouri School of Medicine. He spoke on "The Medical Student and Medical-Professional Marriage — Its Strengths and Pitfalls."

* * *

Dr. Richard L. Burt, professor and chairman of the Department of Obstetrics and Gynecology, recently presented a paper on "Carcinoma of the Vulva" at a meeting of the South Atlantic Association of Obstetricians and Gynecologists in Tampa, Fla.

* * *

Dr. Edwin H. Martinat, associate professor of orthopedics and physical medicine-rehabilitation, has been elected president of a newly-formed branch of the North Carolina Chapter, Arthritis Foundation.

The chapter's new North Central Regional Branch consists of 12 counties in the north central part of North Carolina.

Dr. Martinat is director of the medical center's R. Gardner Kellogg Memorial Program for Physical Medicine and Rehabilitation.

* * *

Dr. Richard C. Proctor, professor and chairman of the Department of Psychiatry, spoke on "Stress Unique to the Executive" and "Normal and Abnormal Stress Reactions" at an Executive Mental Health Symposium held in New Orleans, La. recently. The program was sponsored by the Touro Mental Health Center in New Orleans.

NEWS NOTES FROM THE

DUKE UNIVERSITY MEDICAL CENTER

Through cooperative efforts of Lincoln Hospital, representatives of a public service organization and a Duke Hospital physician, a vital community health need is being met here with free cancer detection clinics twice a week.

The initial thrust of the program is aimed at the early discovery of those with cancer and directing the patients toward immediate treatment.

The clinic is staffed by Lincoln Hospital personnel and a Duke Hospital physician with the aid of seven members of Operation Breakthrough.

Clinics are held from 5 to 8 p.m. each Monday and 3 to 6 p.m. each Thursday at Lincoln Hospital.

Any woman is eligible to receive the checkup and instructions regarding breast self-examination for cancer detection. Each visitor also gets a chest x-ray to screen for signs of lung cancer, heart enlargement, and tuberculosis.

The Durham County Health Department performs and covers the cost of the x-ray and laboratory work. The entire process requires but 15 minutes and there is no pain involved in the examination.

A similar clinic is conducted at Watts Hospital each Thursday.

The North Carolina chapter of the American Cancer Society and the Regional Medical Planning Commission assisted in getting the clinic started financially.

The clinic will run for one year.

NORTH CAROLINA BLUE CROSS AND BLUE SHIELD, INC.

North Carolina Blue Cross and Blue Shield's Over-65 Program will save Medicare subscribers more than \$380,000 in 1970 by absorbing increases in the patient's share of hospitalization costs under Medicare Part A.

The increases are part of an overall 18 per cent boost in Medicare Part A deductibles and coinsurance, announced by the Social Security Administration last September and effective January 1. The inpatient hospital deductible—the amount a patient must pay for the first hospital admission in a spell of illness—was raised from \$44 to \$52. This increase will be covered automatically for those with North Carolina Blue Cross and Blue Shield's Over-65 complementary program. The Medicare coinsurance amount, which the patient must pay from the 61st to the 90th day of each spell of illness, increased from \$11 to \$13 per day. Blue Cross will also pay this coinsurance amount for all its over-65 members. Lifetime reserve benefits coinsurance, which increased from \$22 to \$26 per day, also will be picked up.

Medicare Part A covers the patient's expenses under Medicare for approximately 400,000 elderly people in North Carolina and nearly 20 million in the nation. Benefits totaling more than \$75 million are paid out annually in Medicare in North Carolina.

NATIONAL EASTER SEAL SOCIETY

A program of supplemental aid scholarships to assist students working toward master's degrees in speech pathology or audiology is announced by the National Easter Seal Society for Crippled Children and Adults.

The program is sponsored by Alpha Chi Omega Women's Fraternity.

Scholarships will be granted in amounts up to \$750 toward a student's support during the course of a full academic year. Deadline for applications has been advanced to June 1, 1970, over deadline in previous years of July 15, and awards will be announced in July.

For further information, write to Scholarship Coordinator, Educational Services, National Easter Seal Society for Crippled Children and Adults, 2023 West Ogden Avenue, Chicago, Illinois 60612.

AMERICAN MEDICAL ASSOCIATION

Six North Carolina physicians and one minister have been reappointed or appointed to membership on councils and committees of the Board of Trustees of the American Medical Association, it has been announced by officials of the Medical Society of the State of North Carolina.

Dr. George W. Paschal, Jr., of Raleigh was reappointed as chairman of the Council on National Security. He is also a past president of the State Medical Society, and is vice-president of the Board of Trustees of Wake Forest University.

Dr. Charles W. Styron, also of Raleigh, was reappointed to membership on the Council on Foods and Nutrition. He is also the Secretary of the State Medical Society and has served as a member of a number of society committees.

Dr. Edgar T. Beddingfield, Jr., of Wilson and Stantonsburg, was appointed to membership on the Council on Legislative Activities. He is currently president of the State Medical Society and is also a past chairman of the State Society Committee on Public Relations and Committee on Legislation in addition to membership on a number of other committees.

Dr. Frank W. Jones of Newton was reappointed to the AMA Disability Insurance Claims Review Committee. He is also a past president of the State Medical Society and is currently serving as one of North Carolina's four delegates to the AMA House of Delegates.

Dr. Thomas D. Kinney of Durham was reappointed to the Committee on Transfusion and Transplantation, while Dr. Jay M. Arena was reappointed an alternate member of the Interspecialty Committee representing the American Academy of Pediatrics.

The Reverend Samuel S. Wiley of Durham was reappointed as one of the clergy members of the Committee on Medicine and Religion.

NATIONAL INSTITUTE OF MENTAL HEALTH

The most comprehensive and complete bibliography of the world's published material on suicide and its prevention has been published by the National Institute of Mental Health.

Containing more than 3,300 citations, the *Bibliography on Suicide and Suicide Prevention* answers the investigator's need for a single reference source to the rapidly growing body of literature on suicide. Articles and books cited in the new bibliography deal with all aspects of the problem of suicide—its incidence, causes, treatment, and prevention—and range in style from anecdotal case histories to theoretical discussions.

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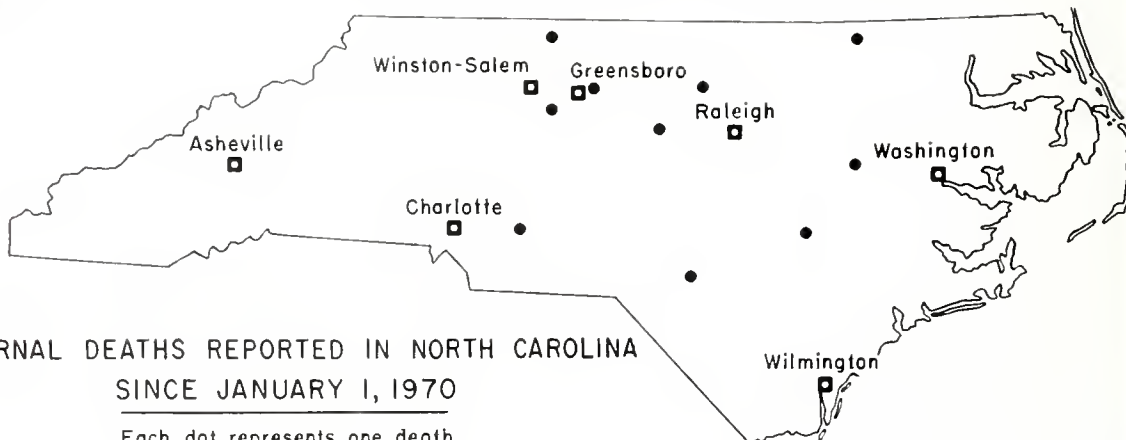
PUBLIC HEALTH—The Virginia State Health Department has positions for energetic physicians who, as state employees, are assigned to direct public health and medical care programs in local health districts. Programs include traditional public health services plus activities under medicare and medicaid. In-service training and opportunity for post-graduate study provided. Liberal fringe benefits. Qualifications—American citizen or declaration, license to practice medicine in Virginia at time of employment, age under 55 (under 60 if M.P.H.), and two years' experience in civilian or military practice. Salary 17,900 with regular increments to \$21,400 in 3½ years. \$19,600 to \$24,500 in 4½ years with M.P.H. in districts over 100,000 population. Inquire director, local health services, Virginia State Department of Health, Richmond, Virginia 23219.

An NIMH residency stipend will be available July 1, 1970 in a fully approved three year training program at the Medical University of South Carolina. The stipend is \$12,000 with a dependency allowance of \$500 per dependent. Applicants must have graduated from a U. S. Medical School and engaged in practice or training other than psychiatry at least four years since internship. Please apply to R. Layton McCurdy, M.D., professor and chairman, 80 Barre Street, Charleston, South Carolina 29401.

COMPREHENSIVE FAMILY CARE GROUP PRACTICE PROGRAM SERVING RACIALLY AND ECONOMICALLY INTEGRATED POPULATION—Based at new city hospital with modern ambulatory care center. Affiliated with Bowman Gray School of Medicine. Opportunity for innovative community medicine practice, teaching, research faculty appointment. Need well qualified generalists, internists, pediatricians, obgynecologists, psychiatrists. Located in Winston-Salem, N. C.: Cosmopolitan, uncrowded community with excellent cultural, educational & recreational resources. Resume to Dr. David Savitz, Dept. Community Medicine, Reynolds Memorial Hospital, 741 N. Highland Ave., Winston-Salem, N. C. 27101.

MATERNAL DEATHS REPORTED IN NORTH CAROLINA SINCE JANUARY 1, 1970

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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety,

and jitteriness. In contrast, CNS depression has been reported. In a few epileptic on increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given mid-evening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-006A / 1/70 / U.S. PATENT NO. 3,001,9



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Kidney Transplantation Using Living Donors

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The most effective treatment of chronic end-stage uremia is renal transplantation from a living related donor. Approximately half of all kidneys being transplanted are from this donor source.¹ For a number of reasons this is the preferred treatment if a suitable donor is available among the potential recipient's siblings, parents, or children. With the use of such donors, the probability of a good result, in terms of transplants functioning one year postoperatively, exceeds 80 to 90 per cent, as reported in recent experience from numerous centers to the world-wide Kidney Transplant Registry.¹ Long-term follow-up statistics are limited, but complications are most frequent during the first year, and five-year success is being reported increasingly. Thus, results are now being achieved with renal allografts which a decade ago could be anticipated only with the use of identical twins as donors. With the use of living related donors, relatively little dialysis is needed, and availability of hemodialysis is not a problem.

In contrast, a one-year transplant survival rate of 42% is reported with the use of cadaveric donors;¹ and because of the scarcity of usable cadaveric kidneys, transplantation from this source usually entails months of waiting and maintenance of the patient on chronic hemodialysis, which is available to only a small fraction of the patients in need. Thus for the patient who has no suitable donor in the family, both chronic hemodialysis and cadaveric donor renal transplantation

are needed, and these means of treatment together entail greater mortality and morbidity, a lower quality of renal function, less rapid and complete recovery and rehabilitation, and greater costs than treatment with living donor renal transplantation.^{1,2}

The advantages of considering living related donors have increased as a consequence of recent developments in tissue compatibility testing. The principal tissue compatibility antigens in man are those of the ABO blood groups and those under control of the genetic locus, HL-A.³ Assurance that a graft will in fact be compatible is possible at present only within families which are genotyped for HL-A; compatible unrelated donors cannot be reliably selected by leukocyte typing and other tissue compatibility tests available at the present time. By using serologic leukocyte typing to genotype a family (i.e., to determine the inheritance of the two paternal and two maternal HL-A alleles* in the children) the possible donor-recipient pairs can be classified as HL-A identical, one-allele-different, or both-alleles-different, as outlined in Table 1. *It is emphasized that one fourth of sib-sib pairs are HL-A identical; that all parent-child and half of sib-sib pairs share one HL-A allele; and that one fourth of sib-sib pairs share neither HL-A allele.* Reported previously³ and summarized in Table 1 are the survival times of over 100 ABO compatible test skin grafts performed within families genotyped for HL-A. The influence of HL-A on the survival times of test skin grafts is evident. It is noteworthy

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*"HL-A allele" is defined as the entire HL-A segment of one chromosome. Although there is some evidence for the existence of definable sub loci of HL-A, the length and structure of this complex locus is largely unknown at the present time.

Table 1
Categories of Living Related Donors

	Donor and Recipient HL-A Identical	Donor and Recipient Different at One HL-A Allele	Donor and Recipient Different at Both HL-A Alleles
Distribution			
Siblings of Recipient	25%	50%	25%
Parents and Children of Recipient		100%	
Test skin graft			
Survival time ³	16-42 days	6-24 days	6-15 days
Acceptability as renal donors (see text)	Preferred	Acceptable	Not acceptable

that survival times of test skin grafts between siblings differing at both HL-A alleles are the same as between unrelated persons.³ Thus with respect to HL-A genotypes, potential living related renal donors fall into three categories. First, HL-A identical siblings are preferred. Second, donors who differ with the recipient at one HL-A allele are acceptable. Such donors are generally more compatible than unrelated donors, but within this category there is considerable individual variation, ranging from very compatible to very incompatible. Third, siblings differing at both HL-A alleles are not acceptable because they are no more likely to be compatible than unrelated donors.

By means of serologic leukocyte typing, approximately 80% of families can be successfully genotyped for HL-A. Thus, if the patient with end-stage renal disease has one or more possible living donors who are suitable in other respects, one of the first steps in management should be leukocyte typing for a determination of the HL-A genotypes of the family members.

The purpose of this paper is to report experiences with living donor renal transplantation with particular reference to the immunologic and genetic studies which are presently being used in the selection of donors.

Materials and Methods

This is a study of the first 26 renal transplants from living related donors at the

Duke and Durham Veterans Administration hospitals. The procedures were performed between February, 1965 and January, 1969. The principal considerations in donor and recipient selection and management will be described; details of immunologic,³ medical,⁴ surgical,⁵ urologic,⁶ and psychiatric⁷ methods were described in previous publications.

Recipient selection and management

Considered for living donor renal transplantation were patients with chronic end-stage uremia who did not have serious systemic disorders such as diabetes or lupus erythematosus, and who did not have severe irreversible extrarenal complications of the primary renal disease. Lower urinary tract obstruction, if present, was correctable. At least one and preferably several possible ABO compatible family members were available as donors. Hemodialysis or peritoneal dialysis was used until renal decompensation was well under control and the donor selection process completed.

The usual operation consisted of bilateral nephrectomy through an abdominal incision, and retroperitoneal implantation of the graft into the iliac fossa through a separate incision, with anastomosis of the renal vein to the external iliac vein, renal artery to hypogastric artery, and donor ureter to bladder. Anastomosis of recipient ureter to renal pelvis was elected instead in eight patients. Prevention and treatment of rejection and infection were the principal concerns

Table 2

Composition of Patient Groups

Group*	No. Patients	Months Since Transplants		Age (yr.)		Sex		Relationship of Donor	
		Mean	Range	Mean	Range	M	F	Sibling	Parent
I	10	17	5-43	31	16-42	9	1	10	0
II	5	12	6-18	24	11-33	3	2	2	3
III	11	20	3-49	32	24-43	10	1	10	1

*Groups are defined in the text

postoperatively. A diagnosis of threatened rejection was based on criteria described by others, principally the observation of reduced renal function unexplained by other causes.

To prevent rejection, azathioprine was administered to recipients beginning two days before transplant. Postoperatively 2 mg/kg/day was maintained until either leukopenia or liver dysfunction prompted reduction in dosage. *If no manifestations of threatened rejection were observed, no other immunosuppressant was ever used.* Upon diagnosis of threatened rejection, prednisone was started, 200 mg per day (adult dose), and the dose was reduced when rejection was reversed completely or maximally improved. The following additional immunosuppressive measures were used for threatened severe rejection which responded poorly to prednisone: antilymphocyte globulin; irradiation of the transplanted kidney; actinomycin-C; and thoracic duct fistula.

Donor selection

All donors were siblings or parents of the recipient, were in normal health, possessed two normal kidneys, desired to donate, were at least 21 years of age (except for one 20.7 years old), and were compatible with respect to ABO blood groups.

Leukocyte typing. The inheritance of HL-A alleles within the family was determined by means of leukocyte typing, and the possible donors were categorized as outlined in Table 1. HL-A identical donors were preferred if available. Otherwise, donors differing with the recipient at one HL-A allele were

accepted; and in a number of families the results of test skin grafts were a determining factor in the selection of such donors. Family members known to differ with the recipient at both HL-A alleles were excluded from consideration as renal donors.

Test skin grafts. When the choice of donor was from among family members differing with the recipient at one HL-A allele, test skin grafts were used to determine the relative immunogenic strength of the one-allele HL-A incompatibilities in question. For this determination 4-mm test skin grafts were performed between family members of the appropriate HL-A genotypes. Strength of an incompatibility was judged in terms of rapidity of rejection of the test skin graft. To avoid presensitization, prospective renal transplant recipients were not used as recipients of test skin grafts.

Results

Observations are summarized in Tables 2-4 as of April, 1969, when the posttransplant follow-up was from 30 to 49 months. Division of the series into three groups is based on donor-recipient HL-A relationship and the results of test skin grafts as follows: In *Group I* are the ten patients who had HL-A identical donors. In *Group II* are the five cases in which renal donor and recipient differed at one HL-A allele, and in which the test skin grafts survived at least 16 days. *Group III* comprises the 11 patients who did not fulfill the criteria for inclusion in Groups I or II. In ten Group III cases donor and recipient differed at one HL-A allele; but in this group, survival time of test skin

Table 3

Episodes of Threatened Rejection

Group	Threatened Rejection		Onset of Rejection (Days Posttransplant)		Maximum BUN During First Rejection (mg%)	
	Yes	No	Mean	Range	Mean	Range
I	6	4	29*	10-44	29*	22-34
II	4	1	11**	2-28	41**	28-51
III	11	0	12	4-40	65	30-118

*Mean in the 5 cases in which threatened rejection was observed during the first year.
In the sixth patient mild rejection was diagnosed 13 months posttransplant by biopsy of the normally functioning renal allograft.

**Mean in the 4 cases in which threatened rejection was observed.

grafts was less than 16 days or was unknown. In four cases test skin graft survival times ranged from 8 to 12 days, and in six cases test grafts were not performed because family members of the necessary HL-A genotypes were not available, or because renal transplantation was performed prior to October, 1967, when this method of donor selection was first used. One Group III patient was transplanted before HL-A genotyping was practiced, and it was not possible retrospectively to determine whether the donor differed at one or both HL-A alleles, although it was clear from leukocyte typing that the donor was not HL-A identical.

In Group I the results were highly satisfactory in follow-ups as long as three and one half years. In this group, manifestations of threatened rejection were mild at most, and in half the patients threatened rejection was not observed. No transplant failed as a result of rejection or the effects of immunosuppression; full rehabilitation with return of the patients to work was essentially complete by six months posttransplant; little steroid-induced Cushing's syndrome was observed; and all recipients did well except for one who died two years after transplant as a consequence of recurrence of glomerulonephritis.

Recovery and rehabilitation was about as rapid in Group II as in Group I. All Group II patients except one required steroids, however, and somewhat more manifestations

of Cushing's syndrome and lower levels of renal function were observed in Group II than in Group I. There was no transplant failure and no mortality in Group II.

The patients in Group III experienced considerably more severe manifestations of threatened rejection and much more prednisone-induced Cushing's syndrome. Rehabilitation and return of the patients to work progressed more slowly in this group, and was not complete until 18 months posttransplant. Good levels of renal function were observed but were lower than in Groups I and II. Death of two patients during the first four months was due largely to severe threatened rejection.

Discussion

The larger the family and the greater the number of possible donors, the greater the probability of identifying a renal donor who predictably will be as exceptionally compatible as those in Groups I and II in this report.

Group I is of particular interest. Renal allografts from ABO-compatible, HL-A identical donors are highly compatible. With the use of such donors rejection is easily prevented, and because of the low doses used the side effects of immunosuppressants are avoided almost completely. Recovery and full rehabilitation are rapid. Almost without exception these are consistent observations in this and other reports on HL-A identical renal allografts.^{8,9} From

Table 4
Immunosuppression and Renal Function

		Time Periods (in Days) Following Transplantation						
Group		0-10	10-20	20-40	40-90	90-180	180-365	365-730
(Number of patients with functioning renal allografts)	I	10	10	10	10	10	6	4
	II	5	5	5	5	5	4	
	III	11	11	11	11	7	5	4
Prednisone, mg/day	I	1 (0-10)	5 (0-45)	17 (0-88)	22 (0-104)	11 (0-65)	5 (0-15)	10 (0-31)
Group mean** and (range*)	II	49 (0-137)	78 (0-155)	46 (0-104)	23 (0-45)	16 (0-32)	13 (0-25)	
	III	62 (0-125)	127 (0-200)	74 (3-156)	56 (14-161)	42 (15-109)	26 (12-41)	14 (7-20)
Azathioprine, mg/day	I	130 (40-175)	89 (0-175)	93 (20-175)	93 (3-169)	95 (0-150)	118 (75-150)	121 (74-150)
Group mean and (range*)	II	131 (35-178)	103 (68-135)	83 (69-125)	94 (37-125)	106 (55-125)	114 (100-125)	
	III	125 (25-180)	114 (5-185)	103 (20-165)	103 (44-150)	111 (50-150)	99 (63-150)	96 (65-150)
Creatinine clearance, ml/min	I	58 (14-90)	78 (45-100)	71 (48-92)	74 (42-104)	79 (34-120)	90 (36-120)	79 (30-107)
Group mean and (range*)	II	49 (28-76)	60 (32-90)	63 (34-94)	70 (36-94)	77 (42-116)	85 (68-100)	
	III	39 (14-50)	53 (8-85)	61 (22-90)	60 (24-97)	67 (48-85)	78 (60-99)	83 (74-97)

*Numbers in parentheses are the range of individual patient means during the stated time periods.

**In five cases in Group I and one in Group II a prednisone dose of zero is counted in computing means.

these experiences with kidney and from previous experiences with skin grafts³ it is clear that HL-A and ABO antigens are the major determinants of tissue compatibility in man. It is emphasized that HL-A identical donors are not rare; one fourth of sib-sib pairs are HL-A identical.

As discussed in more detail previously,³ donors who share only one HL-A allele with the recipient include some who are very compatible, some very incompatible, and some intermediate. The objective of test skin grafts as used in this study was to distinguish degrees of compatibility within this category, which comprises at least two thirds of all potential living related donors. In this respect Group II was rather highly selected because only 30% of one-HL-A-allele-different test skin grafts survive 16 days or more, whereas 70% are in the range of 6-15 days.³ The absence of severe threatened rejection in any Group II patient suggests that test skin grafts will be effective

in identifying at least some highly compatible renal donors within this category. Still to be determined is the extent to which test skin graft survival in the range of 6-15 days will be reliable in predicting the quality of performance of a renal graft across the same one-allele HL-A incompatibility. Presently, from the standpoint of tissue compatibility testing, there is no reliable basis for excluding any ABO compatible, one-HL-A allele-different member of the family from consideration as a renal donor.

Summary and Conclusions

1. In 26 families leukocyte typing and test skin grafts were used in genetic and immunologic studies designed to select the most compatible kidney donor.

2. With 15 renal transplants from donors who fulfilled strict genetic and immunologic criteria, the results were highly satisfactory in follow-ups as long as three and one half years. Rejection activity either was mild or was not observed at all; no transplant

failed and no patient died as a result of either rejection or effects of immunosuppression; a high rate of rehabilitation was achieved; little steroid-induced Cushing's syndrome was observed; and all patients did well except for one who died two years post-transplant as a consequence of recurrence of glomerulonephritis.

3. With 11 renal transplants from donors who were less rigorously selected, results were good but less so than with the others. Death in two patients was due at least in part to severe threatened rejection, and the remainder experienced generally more severe manifestations of rejection and Cushing's syndrome, and less rapid and complete rehabilitation than patients whose donors were more carefully selected.

4. Twenty-three (86%) of the total of 26 transplants from living related donors were functioning well up to four years posttransplant.

5. Transplantation of a kidney from a living related donor is the most effective treatment of chronic end-stage uremia, and this means of treatment is preferred if a suitable donor is available in the family.

6. *The larger the patient's family the greater the probability that a very compat-*

ible renal donor can be selected by means of HL-A genotyping and test skin grafting. With the use of such family donors, recovery and full rehabilitation predictably will be complete and rapid.

Acknowledgement

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In a diabetes, the urine generally exceeds in quantity all the liquid food which the patient takes. It is thin and pale, of a sweetish taste, and an agreeable smell. The patient has a continual thirst, with some degree of fever; his mouth is dry, and he spits frequently a frothy spittle. The strength fails, the appetite decays, and the flesh wastes away till the patient is reduced to skin and bone. There is a heat of the bowels; and frequently the loins, testicles, and feet are swelled.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 233.

Trends in Postneonatal Mortality in North Carolina—1959-1967

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In 1966 Scurletis, Siegel and others reviewed infant mortality trends in North Carolina for the years 1933-1963.^{1,2} Of particular interest were the latter years of the period (1959-1963) during which declines in postneonatal death rates were followed by an increase in the white rate and a leveling off in the rate for white. Since 1963, a new trend has been observed. Both races have experienced decreases in postneonatal mortality; rates in 1967 were the lowest of record.

In an attempt to identify some of the causative factors in this reduction, postneonatal deaths which occurred among 1959-1967 live births have been studied. Table 1 shows the number of neonatal survivors and postneonatal deaths and the postneonatal death rate for each race by year of birth occurrence.

A total of 1,227 postneonatal deaths occurred among infants born during 1959 compared to 762 deaths among infants born in 1967, a decrease of 38%. The number of white postneonatal deaths dropped 30%, and nonwhite deaths have decreased 42% since the beginning of the period. Most of the decline occurred during the last four years, and particular emphasis will be given to these years in the discussion.

Compared with 1963, the number of postneonatal deaths in 1967 dropped 18% for whites and 39% for nonwhites. A portion of this decrease was due to a decline in the number of infants exposed to the risk of postneonatal death (live births less neonatal deaths), and the remainder due to other factors. In other words, had the postneonatal death rates for 1963 prevailed in 1967, the expected number of deaths in 1967 would have been 962 instead of the observed 762, resulting in a numerical decline between 1963 and 1967 of 166 instead of the observed

366 postneonatal deaths. These two hundred "lives saved" represent 55% of the observed numerical decline between the two years, and may be considered to be attributable to factors other than a decrease in the number of infants exposed to the risk of death. The remainder of this paper is concerned with an effort to identify some of these factors responsible for the decline in postneonatal mortality.

Factors Associated with the Event of Postneonatal Death

The recent decline in the postneonatal death rate among whites was greatest between 1965 and 1966. Among nonwhites, the decline which occurred between 1966 and 1967 accounts for more than half of the reduction that has occurred in the nonwhite rate since 1959.

Certain factors directly associated with the occurrence of postneonatal death have been examined for changes in trend. Causes of death, age at death, and calendar quarter of birth occurrence are included.

Causes of death

For both races, infections were responsible for more postneonatal deaths than any other cause throughout the nine years under study. Deaths due to influenza and pneumonia were more prevalent than deaths due to any other type of infection. Table 2 shows postneonatal death rates for major causes of death by race for each year of the period 1959-1967. Examination of these data reveals certain causes of death influential in the rate reduction experienced since 1963.

For whites, the decline in deaths attributed to congenital malformations was greater than declines for any other major cause. Slight improvement occurred for most of the other causes of death. Reduction in the postneonatal death rate for nonwhites, on the other hand, was primarily due to a decline in deaths attributed to infections. While improvement occurred for all other causes (ex-

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Table 1
Neonatal Survivors, Postneonatal Deaths and Postneonatal Death Rates by Race:
North Carolina, 1959-1967

Year	Neonatal Survivors *		No.	Postneonatal Deaths		
	White	Nonwhite		White Rate**	No.	Nonwhite Rate**
1959	73,693	34,734	427	5.8	800	23.0
1960	73,837	33,666	424	5.7	782	23.2
1961	75,468	33,981	384	5.1	756	22.2
1962	73,909	33,481	404	5.5	760	22.7
1963	72,236	32,974	365	5.1	763	23.1
1964	71,245	32,714	378	5.3	721	22.0
1965	65,164	30,551	348	5.3	633	20.7
1966	63,059	27,945	304	4.8	564	20.2
1967	63,189	27,699	300	4.7	462	16.7

* Survivors of the neonatal period

** Per 1,000 neonatal survivors

cept congenital malformations), the dramatic decrease in deaths due to infections would account for most of the decline in the non-white rate. Whether these leading cause-specific declines reflect recent strides of a medical and environmental nature or a disproportionate decline in potentially high risk births is discussed later.

Age at death

Yearly postneonatal death rates for three RATE*

age categories during 1959-1967 are shown graphically in Figure 1. As can be seen in the graphs, declines have occurred in all age groups for both races since the beginning of the period. Among nonwhite infants 2-5 months of age at death, an upward trend was experienced until 1964, after which the rate dropped 30%. Since 1965, the rate for white infants 6-11 months of age has declined more than the rate for younger infants.

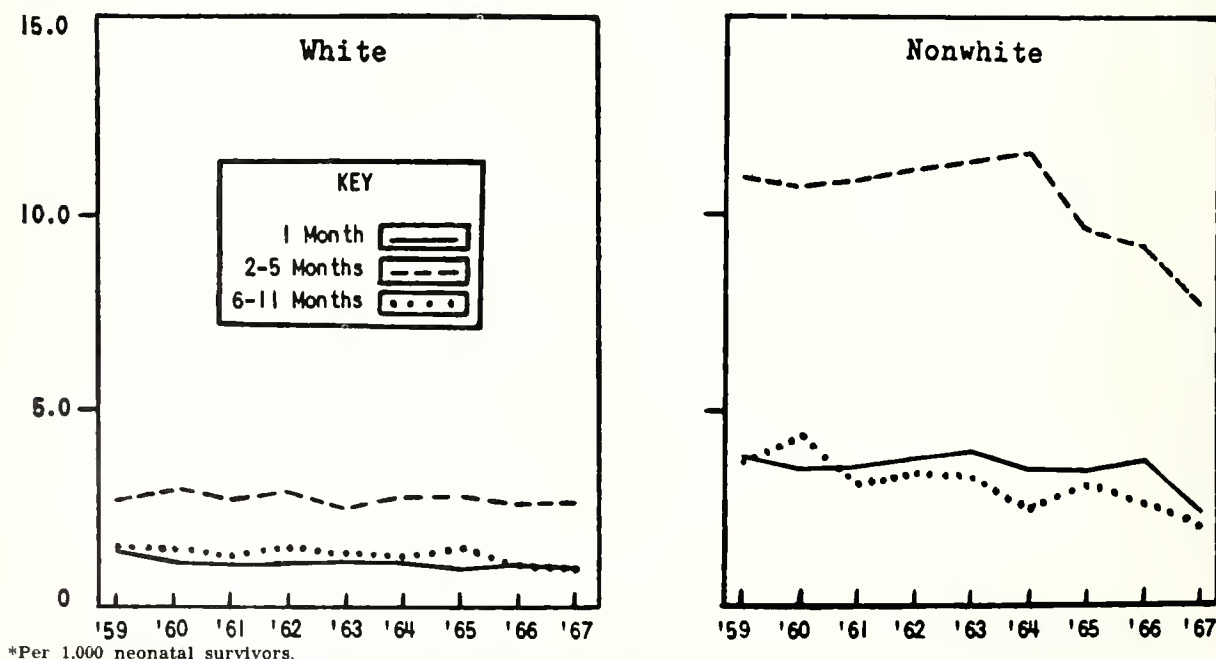


Fig. 1. Postneonatal death rates by race and age at death.

Table 2
Postneonatal Death Rates* by Race and Cause of Death:
North Carolina, 1959-1967

Race and Cause	Year								
	1959	1960	1961	1962	1963	1964	1965	1966	1967
<u>White</u>									
Infections ^a	2.1	2.5	2.1	2.4	1.9	2.0	1.9	1.8	1.9
Influenza-pneumonia ^b	1.4	1.8	1.4	1.8	1.2	1.3	1.3	1.2	1.2
Congenital malformations ^c	1.5	1.4	1.2	1.2	1.5	1.4	1.3	1.2	0.9
Accidents ^d	0.5	0.7	0.5	0.6	0.6	0.5	0.6	0.5	0.5
Immaturity ^e	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Birth Injury ^f	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Other Diseases ^g	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Other	1.5	1.2	1.2	1.2	0.9	1.4	1.5	1.3	1.3
Total	5.8	5.7	5.1	5.5	5.1	5.3	5.3	4.8	4.7
<u>Nonwhite</u>									
Infections ^a	13.0	12.9	13.0	13.8	14.2	12.5	11.4	10.1	8.2
Influenza-pneumonia ^b	8.4	8.6	8.5	9.5	8.8	7.8	8.4	7.0	5.2
Congenital malformations ^c	1.2	1.5	1.5	1.1	1.4	1.1	1.3	1.7	1.6
Accidents ^d	2.0	2.0	2.0	2.1	2.0	2.3	2.2	2.1	1.8
Immaturity ^e	0.3	0.3	0.4	0.4	0.2	0.3	0.4	0.3	0.2
Birth Injury ^f	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Diseases ^g	1.1	1.0	0.8	0.8	0.8	0.6	0.5	0.4	0.2
All Other	5.3	5.4	4.5	4.5	4.5	5.3	4.9	5.6	4.7
Total	23.0	23.2	22.2	22.7	23.1	22.0	20.7	20.2	16.7

* Based on survivors of the neonatal period, deaths per 1,000 neonatal survivors.

** International Statistical Classification - 7th Revision.

a. 001-138, 340, 470-475, 480-493, 543, 572, 571.0, 763, 764

b. 480-493, 763

c. 750-759

d. 800-802, 840-962, (excludes motor vehicle accidents)

e. 774-776

f. 760, 761

g. 770-772

Calendar quarter of birth

When the data are examined by calendar quarters for the years 1964-1967, seasonal variations are observed. For both races, greatest improvement in the death rate occurred among infants born during the second and fourth calendar quarters; the nonwhite rate was 40% less during the last quarter of 1967 than during this period in 1964. It should be emphasized that these are quarters of birth occurrence. In other words, chances of postneonatal survival improved more for

infants born during the second and fourth quarters than for infants born during the first and third. This may not be surprising, since second and fourth quarter infants are more apt to be subjected to the hazards of extreme heat or cold during the months immediately following birth. The observed seasonal improvement may, therefore, reflect recent changes in socio-economic and related environmental conditions particularly advantageous to these infants. A disproportionate decline in potentially high risk births during these quarters may also be a factor.

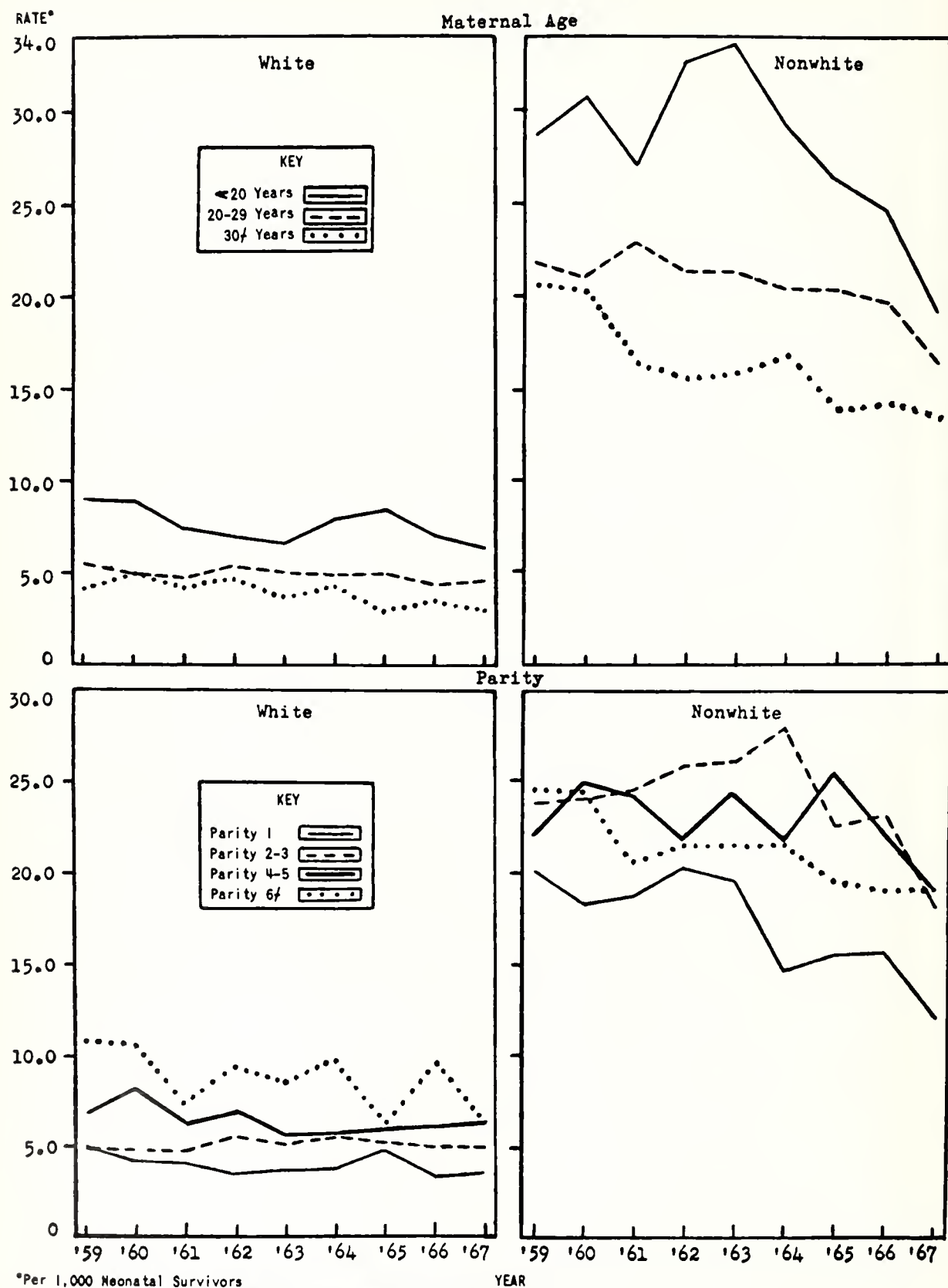


Fig. 2. Postneonatal death rates by race and specified variables.

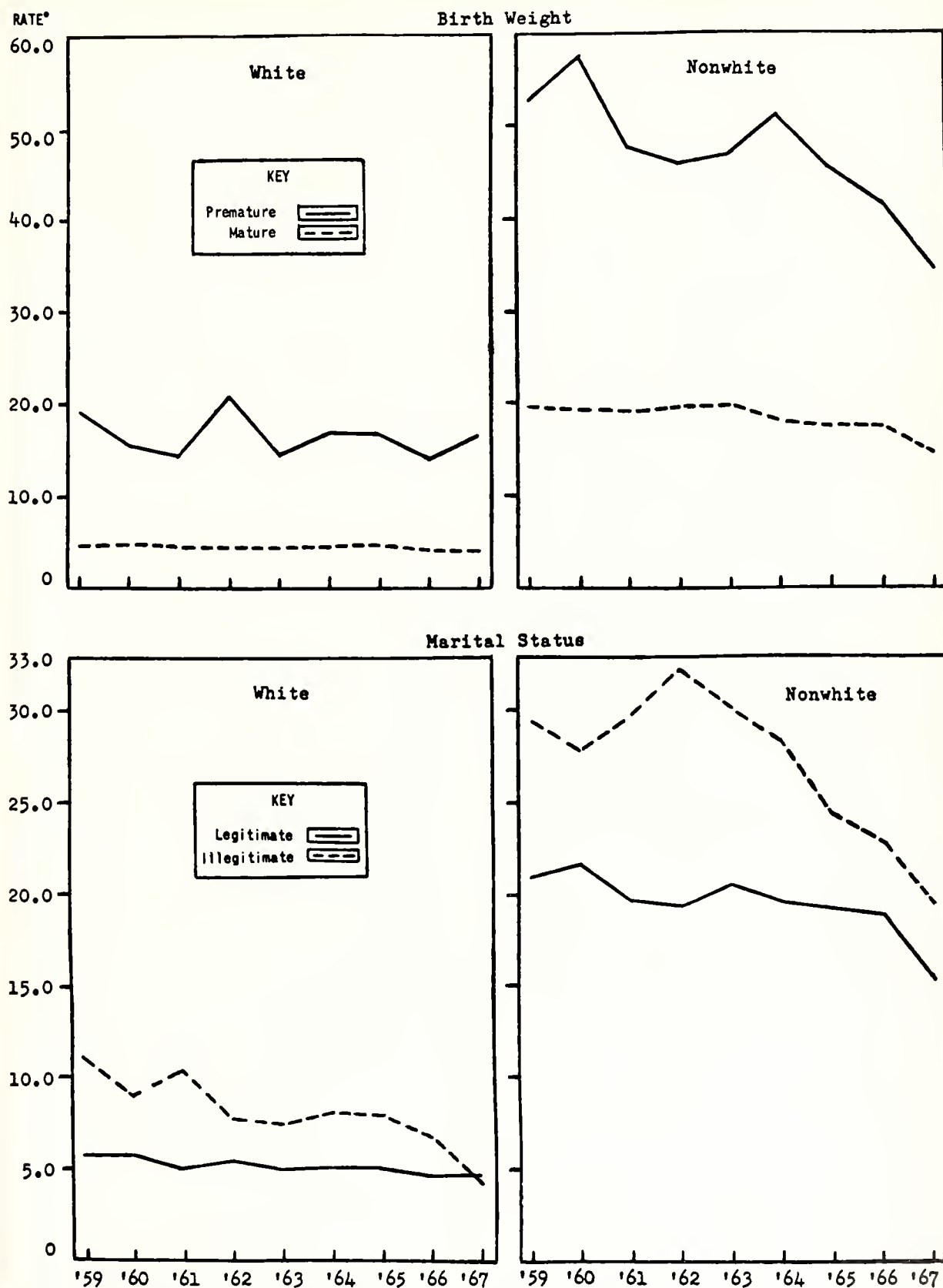


Fig. 2 (Continued). Postneonatal death rates by race and specified variables.

Other Factors Associated with Postneonatal Mortality

Data from birth certificates provide information regarding certain other factors known to affect postneonatal mortality. Race and variable-specific death rates by maternal age, parity, birth weight, and marital status are shown graphically in Figure 2.

The procedure described previously has been utilized to estimate the proportion of recent variable-specific decreases in deaths attributable to a decline in neonatal survivors and, alternatively, the proportion of the decreases due to other factors. To reiterate the procedure, it is supposed that death rates in 1963 prevailed in 1967 to obtain expected deaths for the latter year. The difference between this figure and the observed number of deaths represents "lives saved" due to factors other than a decrease in the number of infants exposed to the risk of postneonatal death. Relating the number of "lives saved" to the actual numerical decline between 1963 and 1967 yields the proportion of the decline attributable to these other factors. Alternatively, the complement of this proportion represents the decline in the number of neonatal survivors, which incidentally is primarily due to the decreasing birth rate between the two years.

Maternal age

Among offspring of white women under 20 years of age, the postneonatal death rate peaked in 1965, with lower rates in 1966 and 1967. For infants of white women over 30 years, a slightly downward trend in rate is observed, while little change has occurred in the rate for infants of 20- to 29-year-old since 1959. Offspring of younger and older women represent high risk groups of infants.

For nonwhites, progressive declines were general for all age categories, with the greatest decreases occurring among infants of women under 20 years of age. Improvement in the rate followed a peak in 1963.

For both races combined, all of the decrease since 1963 in postneonatal rates of infants of women under 20, and approximately one-half of the decrease in the rate

of infants of women 20 to 29 years of age were due to factors other than the decline in the number of neonatal survivors. For infants of women 30 and over, only 25% of the decrease was due to these other factors.

Parity

The greatest drop in the white rate occurred among infants born to women of parity 6 or higher. Postneonatal rates for infants born to women of parity 2-3 also declined during the last few years, following an upward trend. For infants of women of parity 4-5, the rate has increased since 1963.

For nonwhites, decreases in rates since 1959 were greatest among offspring of primipara. Since 1962, the rate dropped 40%. Following an upward trend until 1964, the postneonatal rate of infants born to women of parity 2-3 decreased 35%. Substantial declines have also occurred in recent years for infants born of higher parity women.

Since 1963 all of the decrease in the postneonatal rate for infants born of primiparous women of both races, and nearly two-thirds of the decrease for infants born to women of parity 2-3 were due to factors other than the decline in the number of infants exposed to the risk of postneonatal death. For offspring of higher parity women, only a small part of the decrease in rate was due to these other unknown factors.

Birth weight

Following a peak rate of 20.7 in 1962, the rate for white premature infants was 16.5 in 1967. Some improvement in rate is also observed for infants of mature birth weight.

For nonwhites, per cent decline in the postneonatal rate was also greater among premature infants. Rates for full-term infants have also declined steadily since 1963.

Between 1963 and 1967, 47% of the decrease in rate experienced among premature infants of both races and 56% of the decline among mature infants were due to factors other than decreases in the number of infants exposed to the risk of postneonatal death.

Marital status

Declines in rates are observed for all race-legitimacy groups. The rate for white illegitimate infants was 61% lower in 1967 than in 1959, and the nonwhite illegitimate rate dropped 39% following a high rate in 1962.

All of the decrease in rates experienced between 1963 and 1967 among illegitimate infants of both races was due to factors other than a decrease in the number of infants exposed to the risk of postneonatal death. Among legitimate infants, 43% of the decrease was due to these unknown factors.

Summary

There were 465 fewer postneonatal deaths in North Carolina among infants born in 1967 than among infants born in 1959. For both races a reduction in total number of births and a reduction in the postneonatal death rate itself account for the decline experienced since 1963.

For white infants, the reduction in postneonatal deaths due to congenital malformations was greater than the declines in deaths due to other causes. Greatest improvement in rate occurred among premature infants, illegitimate infants and infants aged 6-11 months, infants of women of parity 6 or more, and infants born to women under 20 and over 29 years of age.

For nonwhites, deaths due to infections, including influenza and pneumonia, decreased more than did those due to other

causes. Greatest reductions in rates occurred among premature infants, illegitimate infants, infants 2-5 months of age, infants of low parity women, and offsprings of women under 20 years of age.

For both races, improvements in rates were greatest for infants born during the second and fourth calendar quarters.

Analyzing the decline that was experienced between 1963 and 1967 for proportionate shares contributed by a decline in the number of neonatal survivors and by other unknown factors under the assumptions set forth, it is shown that these latter factors play a major role. For infants born of younger women, women of low parity and unmarried women, most of the decrease in deaths is shown to be attributable to these other factors. For infants of older women and women of high parity, the major contributing factor was the decline in number of infants being exposed to the risk of postneonatal death.

In view of this analysis, it is concluded that the overall decrease in postneonatal mortality since 1963 is more related to a check in unfavorable mortality situations than to a disproportionate decrease in potentially high risk births.

References

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When a tooth is carious, it is often impossible to remove the pain without extracting it; and, as a spoilt tooth never becomes sound again, it is prudent to draw it soon, lest it should affect the rest. Tooth-drawing, like bleeding, is very much practiced by mechanics; the operation is not without danger, and ought always to be performed with care. A person unacquainted with the structure of the parts will be in danger of hurting the jawbone, or of drawing a sound tooth instead of a rotten one.—William Buchan: *Domestic Medicine*, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 257.

Bacterial Endocarditis in the Pediatric Age Group

Clinical Observations Over a Twenty-Year Period

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Bacterial endocarditis in the pediatric age group has repeatedly been reported to be an uncommon entity, with an incidence varying from 0.222 to 0.520 per 1,000 hospital admissions.¹⁻⁵ In addition, numerous authors report that the clinical pattern of this disease has changed significantly in the past several years.

In order to evaluate the clinical picture and incidence of bacterial endocarditis in the pediatric age group, the experience with this disease at the North Carolina Baptist Hospital (NCBH) over the past 20 years is reviewed. Cases encountered from 1946 through 1955 (Group A) are compared with those from 1956 through 1965 (Group B), to make any changes in the clinical pattern more readily apparent.

Clinical Material

The medical records of all patients 16 years of age and younger seen at NCBH during the period 1946-1965 with a diagnosis of bacterial endocarditis were thoroughly evaluated. Cases from 1946 through 1955 were compared with those from 1956 through 1965. No attempt was made to differentiate the subacute and acute cases of the disease, although they were so coded at the time of discharge. A protocol was devised and utilized for the acquisition of data in an attempt to achieve objectivity. The information derived from the history and physical findings was taken from the charts as recorded by the senior physician.

In an effort to determine more accurately the presence of bacterial endocarditis as the charts were reviewed, certain factors were given considerable attention. These were a heart murmur, a persistent elevation of temperature, splenomegaly, embolic phenomena, and positive blood cultures. On several occasions the diagnosis of bacterial

endocarditis was made in the presence of only a persistently elevated temperature with an associated heart murmur. Because the cases reviewed here were selected on a retrospective examination of the charts, the inclusion of a questionable case (or cases) is a possibility.

Incidence

A total of 285,430 patients were admitted to NCBH during the 20-year period 1946-1965, inclusive. Admissions numbered 110,376 during the first ten years, and 175,054 during the latter ten years. During this entire period a total of 131 patients were admitted with a diagnosis of bacterial endocarditis, giving an incidence of 0.459 per 1,000 hospital admissions. There were 46 cases within the first ten-year period (0.416/1,000 admissions), while the number rose to 85 in the second period (0.486).

Twenty-five (19.1%) of the 131 patients with bacterial endocarditis were 16 years of age or younger. Patients in this age group accounted for 7 (15.2%) and 18 (21.2%) of the cases during the first and second ten-year periods, respectively.

During the two decades being considered, the hospital records list a total of 63,218 pediatric (13 years of age and younger) admissions; 25,425 in the first period and 37,793 in the second. Six (13%) and nine (10.6%) of the total cases of bacterial endocarditis were found among the pediatric admissions during the first and second periods. This indicates that this disease was seen rather infrequently on the pediatric ward—1 out of every 4,214 admissions, or an incidence of 0.237/1,000 patients aged 13 years or younger admitted to the hospital (Table 1).

Table 2 shows the age distribution of the children admitted with a diagnosis of bacterial endocarditis. The youngest patient was 13 months old, while three children were 16

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Table 1
Incidence

	NCBH 1946-1955	NCBH 1956-1965	NCBH 1946-1965
Total number of admissions	110,376	175,054	285,430
Total number of cases diagnosed as bacterial endocarditis	46	85	131
Incidence in total hospital admissions (per 1,000)	0.416	0.486	0.459
Total number of patients age 16 and younger with bacterial endocarditis	7	18	25
Total number of pediatric admissions (age 13 or younger)	25,425	37,793	63,218
Total number of cases of bacterial endocarditis among pediatric admissions	6	9	15
Incidence of bacterial endo- carditis in the pediatric admissions (per 1,000)	0.236	0.238	0.237

years of age. Table 3 reveals that the sex distribution was essentially equal: three males and four females in Group A, nine males and nine females in Group B.

Predisposing Factors

Twenty-two (88%) of the children with bacterial endocarditis had underlying heart disease, with the majority (16 patients) having a congenital cardiac anomaly. Six of the patients had rheumatic heart disease—four being inactive and two active. The charts of three patients did not reveal previous cardiac disease. These findings are listed in Table 3.

Of those patients with congenital heart disease, the largest number (four) had ventricular septal defects, three had tetralogy of Fallot; two, coarctation of the aorta; and one each, patent ductus arteriosus, tricuspid atresia, and a true dextrocardia with cor biloculare and pulmonary valve stenosis. Two patients had incompletely diagnosed congenital heart disease; one of these had pulmonary stenosis.

Precipitating Factors

The majority of the patients discussed above had antecedent conditions which ultimately may have provided portals of entry for the causative organisms. A summary of these conditions is found in Table 5. Upper respiratory tract infections were most frequently noted and were observed from two

Table 2

Age (Years)	Age Distribution		Total
	Group A No. Patients	Group B No. Patients	
1	—	1	1
2	1	—	1
3	—	—	—
4	—	—	—
5	—	—	—
6	—	2	2
7	—	2	2
8	2	1	3
9	—	2	2
10	1	—	1
11	1	1	2
12	—	—	—
13	1	2	3
14	1	2	3
15	—	2	2
16	—	3	3
Totals	7	18	25

Table 3

Sex	Sex Distribution		Total
	Group A No. Patients	Group B No. Patients	
Male	3	9	12
Female	4	9	13
Total	7	18	25

Table 4

	Underlying Heart Disease		Total
	Group A No. Patients	Group B No. Patients	
Congenital heart defect			
Ventricular septal defect	—	4	4
Tetralogy of Fallot:		3	3
Coarctation of aorta	1	1	2
Patent ductus arteriosus	—	1	1
Tricuspid atresia with anastomotic procedure	—	1	1
Atrial septal defect	—	1	1
Truncus arteriosus	1	—	1
True dextrocardia- cor biloculare with bi- cuspid pulmonary valve and pulmonary stenosis	1	—	1
Pulmonic stenosis?	1	—	1
Type undetermined	1	—	1
Rheumatic heart disease			
Active	—	1	1
Inactive	2	3	5
No other heart disease	—	3	3
Total	7	18	25

days to three months prior to the diagnosis of bacterial endocarditis. Active rheumatic heart disease was associated with one

Table 5
Precipitating Factors

	Group A No. Cases	Group B No. Cases	Total
Antecedent Infections			
Upper respiratory tract infection	4	8	12
Urinary tract infection	—	3	3
Nausea and vomiting with diarrhea	—	1	1
Nausea and vomiting with transient meningeal signs	—	1	1
Otitis media	—	1	1
Repeated bronchitis secondary to aspiration of foreign body	—	1	1
Bacterial endocarditis 4 years previously with right frontoparietal abscess, preceded one month by tooth extraction; numerous caries present	1	—	1
No antecedent infection	2	3	5
Total	7	18	25

of the upper respiratory tract infections of three months' duration. Three children were found to have had persistent urinary tract infections three to five months prior to the diagnosis of endocarditis. One each of the following antecedent conditions was noted prior to the diagnosis of bacterial endocarditis by the stated time interval: nausea and vomiting with diarrhea, 3 days; nausea and vomiting with transient meningeal signs, 10 days; otitis media, 18 days; persistent bronchitis following aspiration of a foreign body, two months. One child had had bacterial endocarditis and a right frontoparietal abscess four years previous to the second episode.

Causative Organisms

Table 6 compares the causative organisms isolated from the blood culture of the patients. The blood cultures were positive in 19 cases, while in another case, short chain gram-positive cocci were seen on a smear from the broth, but were never identified in culture. No organisms were isolated in five cases in spite of multiple cultures varying in number from 6 to 12.

Table 6
Results of Blood Cultures

	Group A No. Cases	Group B No. Cases
Organisms Isolated		
Alpha hemolytic <i>Streptococcus</i>	3	5
Hemolytic <i>Staphylococcus</i> , coagulase positive	—	2
Hemolytic <i>Staphylococcus</i> , coagulase negative	1	2
<i>Diplococcus pneumoniae</i>	—	1
Alpha hemolytic <i>Streptococcus</i> and <i>Bacterium anitratum</i>	—	1
Hemolytic <i>Staphylococcus</i> coagulase positive and <i>B. anitratum</i>	—	1
Hemolytic <i>Staphylococcus</i> coagulase negative and <i>Aerobacter aerogenes</i>	—	1
Alpha hemolytic <i>Streptococcus</i> and <i>Candida albicans</i>	—	2
Short-chained gram-positive cocci	—	1
No growth	3	2

Sixteen (84%) of the 19 successful cultures were positive on the first attempt, while 1 each was successful on the second, third, and seventh attempts at isolation. In three cases in group B, two causative organisms were isolated; in one of these both organisms were isolated initially, while intervals of one and three weeks elapsed between isolation of the first and second organism in the other two cases.

In group A the dominant organism isolated was alpha hemolytic *Streptococcus*, which was isolated in two of the four positive blood cultures. In this group hemolytic *Staphylococcus* was isolated in one case, and no growth was obtained from cultures in three cases.

In the second group, alpha hemolytic *Streptococcus* was the most frequently isolated organism, being cultured in eight cases (44%). Coagulase positive hemolytic *Staphylococcus* was isolated in three cases (17%). Coagulase negative hemolytic *Staphylococcus* was isolated in three cases, while *Bacterium anitratum* and *Candida albicans* were each isolated on two occasions. *Aerobacter aerogenes* and *Diplococcus pneumoniae* were each isolated on one occasion. As previously noted, short-chained gram-positive cocci were seen on one occasion. In

Table 7
Clinical Findings

Case	Age yrs/mos	Sex	Heart Rate	ESR mm/hr	Temp.	Hemo- globin (gm)	WBC	Pete- chiae	Spleno- megaly (cm)	Hepato- megaly (cm)	Heme- turia	Other embolic phenomena
1.	13	M	68	NR	100.2	18	19,000	-	-	-	-	Renal
2.	8/6	F	110	20	100.4	13	12,700	-	-	1	1+	-
3.	8	F	100	38	101.4	15	10,000	-	2	-	Trace	-
4.	11	M	120	32	102.0	10	21,000	Feet ankle trunk	-	4	2+	-
5.	14	M	86	35	102.0	12.8	6,400	-	-	6	-	-
6.	2/6	F	130	6	99.5	12.5	13,000	-	-	1	-	Cerebral
7.	10	F	100	35	102.0	13	7,900	-	-	-	-	-
8.	13	M	80	22	97.0	7.1	7,000	Lower limb	6	2	-	Spleen
9.	15/10	F	105	43	101.4	12.8	9,000	-	-	-	1+	CNS
10.	16/6	F	100	44	98.2	11	13,800	Subungal	-	4	1+	-
11.	1/1	F	160	8	102.0	12.8	7,000	-	-	4	-	-
12.	8	M	140	10	103.4	9	11,600	-	4	6	-	Pulmonary
13.	14/8	M	120	30	102.0	10.4	11,000	-	1	-	-	-
14.	16	M	125	18	99.4	14.5	14,000	-	-	-	1+	-
15.	9/6	F	106	32	102.0	9.7	12,000	-	4	-	1+	-
16.	15	F	96	5	97.0	16.8	8,000	Hands feet lips	1	1	2+	-
17.	16	F	156	-	103.6	11.5	18,000	Yes	-	8	4+	-
18.	13	M	92	31	101.0	14.0	9,800	-	4	-	-	-
19.	6/7	F	92	8	99.6	12.5	11,000	-	1	3	+	-
20.	7/10	F	124	40	99.6	9.0	11,700	-	-	-	-	-
21.	14/2	F	120	32	NR	12.0	10,000	-	1	-	+	? spleen, pulmonary
22.	9	M	120	34	100.0	10.0	10,000	Left hand	1	1	-	CNS
23.	11	M	120	30	103.0	11.0	20,000	-	-	-	1+	-
24.	5/6	M	118	20	102.0	12.0	12,000	-	-	-	-	-
25.	7/8	M	140	30	104.0	11.8	11,000	-	-	-	-	-

Heart murmur was present in all cases.
Patient 9 had an Osler's node in left thumb.

two cases in group B, no causative organisms could be isolated.

Other Laboratory Findings

The remaining laboratory findings are summarized in Table 7. The erythrocyte sedimentation rate was elevated in the majority of the patients, being greater than 20 mm/hour in 4 patients in group A, and in 11 patients in group B. The white cell

counts varied from 5,400 to 21,000/cu mm with the majority of the values falling between 10,000 and 20,000. In the earlier group, the count was above 10,000 in four patients, the highest value being 21,000. In the second group there were 11 patients with counts greater than 10,000, the highest being 20,000. Anemia⁸ as noted by a hemoglobin value less than normal for a given

Table 8
Cardiac Abnormalities

Case	Abnormalities
1.	True dextrocardia; cor biloculare; bicuspid pulmonary valve with pulmonary stenosis
2.	Rheumatic heart disease
3.	Truncus arteriosus
4.	Undetermined
5.	Rheumatic heart disease
6.	Coarctation of aorta with bicuspid aortic valve
7.	Congestive heart disease? Pulmonary stenosis
8.	Ventricular septal defect
9.	Undetermined
10.	Acute rheumatic carditis
11.	Tetralogy of Fallot
12.	Pulmonary stenosis; ventricular septal defect
13.	Acute rheumatic carditis
14.	Undetermined
15.	Rheumatic heart disease
16.	Tricuspid atresia
17.	Atrial septal defect
18.	Tetralogy
19.	Rheumatic heart disease
20.	Coarctation of aorta
21.	Undetermined
22.	Patent ductus arteriosus
23.	Ventricular septal defect
24.	Tetralogy
25.	Ventricular septal defect

age was noted on 12 occasions, twice in group A and 10 times in group B. Hematuria was observed in three patients in the earlier group and in ten patients in group B. However, three of the patients in the latter group had a history of recent urinary tract infection.

Physical Findings

Cardiac murmurs were found in every patient. Changing murmurs were noted twice in group A and eight times in group B. Tachycardia as related to specific age group was observed on only one occasion in group B. Splenomegaly was observed in 12 children, all but one of whom were in group B. Hepatomegaly was also seen in half of the cases: four in group A and nine in group B. Hepatosplenomegaly was noted in five children, all from group B.

Eighteen of the patients were febrile on admission. Six in group A and 12 in group B had temperature readings greater than 100.0 F. Petechiae were noted in six cases, one in group A and five in group B. Embolic phenomena were observed infrequently.

Osler's nodes were seen only once—in group B. Other forms of embolic phenomena also became manifest: in group A, renal, renal and cerebral, and cerebellar localizations were noted; in group B, splenic, cerebral, occipital, splenic and pulmonic, and multiple generalized embolizations were noted.

Mode of Therapy

Four patients in group A were treated with penicillin alone for periods varying from 6 to 31 days, with dosages varying from 600,000 to 3,600,000 units daily. A single patient received 1,000 mg of Aureomycin for five days and was discharged. The other two patients received penicillin and additional drugs.

Only three patients in group B received penicillin alone; the minimum amount administered was 800,000 units daily, while the maximum dose of penicillin given as the single antibiotic was 28,000,000 units per day. The duration of continuous therapy varied from 29 to 133 days. The remaining 15 patients in group B received a combination of antibiotics (Table 9).

Table 9
Causative Organisms and Treatment

Case	Age yrs/mos	Sex	Organisms Isolated	Therapy	Days in Hospital
1.	13	M	No growth	Penicillin Chloromycetin Aureomycin	27*
2.	8/9	F	Alpha hemolytic Staphylococcus	Penicillin	31
3.	8	F	Alpha hemolytic Streptococcus	Penicillin	18
4.	11	M	No growth	Penicillin Streptomycin	6**
5.	14	M	No growth	Penicillin	46
6.	2/6	F	Alpha hemolytic Streptococcus	Aureomycin	5†
7.	10	F	Alpha hemolytic Streptococcus	Penicillin	19
8.	13	M	Alpha hemolytic Streptococcus	Penicillin	
			Candida albicans	Amphotericin B	90
9.	15/10	F	No growth	Penicillin Streptomycin	53
10.	16/1	F	C. Albicans, alpha hemolytic Streptococcus	Amphotericin B Penicillin	104
11.	1/1	F	Staphylococcus, coagulase negative Aerobacter aerogenes	Tetracycline Penicillin	16
12.	8	M	Alpha hemolytic Streptococcus	Penicillin	120
13.	14/8	M	Alpha hemolytic Staphylococcus Bacterium anitratum	Penicillin Kannamycin Chloromycetin	61
14.	16	M	Short-chained gram-positive cocci	Penicillin Streptomycin Chloromycetin Sulfisoxazole	40
15.	8/6s	F	Alpha hemolytic Streptococcus	Penicillin Streptomycin	40
16.	15	F	B. anitratum; alpha hemolytic Streptococcus	Streptomycin Penicillin Kannamycin Keflin	51
17.	16	F	Hemolytic Staphylococcus, coagulase negative	Penicillin	—1
18.	13	M	Alpha hemolytic Streptococcus	Penicillin Streptomycin	27
19.	6/7	F	Hemolytic Staphylococcus, coagulase negative	Penicillin	41
20.	7/10	F	Alpha hemolytic Streptococcus	Penicillin	34
21.	14/2	F	No growth	Penicillin Streptomycin	53
22.	9	M	Hemolytic Staphylococcus, coagulase negative	Penicillin Streptomycin Penicillin Chloromycetin Erythromycin	34‡
23.	11	M	Hemolytic Staphylococcus,	Penicillin	
24.	5/6	M	coagulase positive	Erythromycin	28

*Patient died of cerebral abscess

**Patient died of pulmonary artery aneurysm with thrombosis and myocardial hypertrophy

†Patient was seen by local physician 2½ weeks prior to NCBH admission. The case was diagnosed, treatment was instituted, and patient was sent here for confirmation of diagnosis. She was discharged with anticipated continuation of antibiotic therapy.

‡Patient died suddenly with probable rupture of tricuspid valve, leading to sudden right-sided congestive heart failure.

Discussion

Incidence

The incidence of bacterial endocarditis for all age groups at NCBH over a 20-year period (1946-1965) was 0.459 per 1,000 hospital admissions. A slight increase was noted in the latter decade as compared with the preceding one (Table 1). The percentage of cases occurring in patients 16 years of age or younger increased from 15.2% to 21.2% of the total number of cases of bacterial endocarditis observed at this hospital. More significant, however, is that the incidence on the pediatric service remained virtually constant—0.236 and 0.238 cases per 1,000 pediatric admissions for the first and second ten-year periods. Therefore, while a slight increase in the incidence of the disease was noted within the total hospital population, the incidence on the pediatric service remained unchanged. This rate is less than that generally seen by other workers²⁻⁵ who report a rate varying from 0.45 to 0.52 cases per 1,000 pediatric admissions. Zakrzewski and Keith¹ report an incidence of 0.222 per 1,000 admissions, which is close to that found at NCBH.

Predisposing factors

The majority of the patients aged 16 years or younger seen at NCBH with bacterial endocarditis had a cardiac lesion that probably predisposed them to the disease. It is known that a patient with a congenital heart defect runs a "small but definite risk of developing endocarditis."⁷ It is postulated that those congenital cardiac defects which cause intracardiac or intravascular trauma are frequently associated with bacterial endocarditis, as it is assumed that vegetations tend to develop at sites of trauma rather than at the site of the defect.⁸

The association of bacterial endocarditis with an atrial septal defect is uncommon.^{3,9} In most of these cases the lesions are found on adjacent valves rather than on the margin of the defect.^{8,9} The vegetations in the single case of an atrial septal defect in this series were on the posterior leaflet of the mitral valve.

Of the acyanotic variety of congenital heart defects, ventricular septal defects

were the ones most frequently associated with bacterial endocarditis; of the cyanotic variety, tetralogy of Fallot was most frequently associated with the disease. These observations at NCBH are in accord with the findings of other workers.^{1,2}

No underlying cardiac disease could be detected in 13.9% of the patients in Seabury's series;¹⁰ 17.2% of the postmortem examinations in his series revealed no predisposing factor.

Precipitating factors

As noted in Table 5, nearly half of the patients in both groups had had upper respiratory tract infections preceding the diagnosis of bacterial endocarditis, four (57%) and eight (44%) in groups A and B, respectively. Zakrzewski and Keith¹ also found the upper respiratory tract infection to be the most prevalent precipitating factor in their patients.

The only instance of poor oral hygiene as noted from the charts occurred in a patient in group A; however, numerous other sites of infection were noted in this patient, and it is unlikely that the dental caries could be singled out as the primary antecedent infection. This observation is of some interest, as Hopkins¹¹ noted that *Streptococcus viridans* is the predominant organism cultured from root ends of extracted teeth (90%). Hopkins¹¹ also noted that transient bacteremia is seen in 16.6% of the patients undergoing multiple extractions. It is thought that bacteremia originates at the site of extraction, as bacteria gain access to the blood stream at this point.¹² These findings are opposed to the thinking of Tompsett,¹³ who believes that dental infections are not commonly incriminated in bacterial endocarditis.

Causative organisms

Organisms were accurately identified in 19 of the 25 patients with bacterial endocarditis, representing 84% of the patients. In a twentieth patient, microbiological studies could only reveal short-chained gram-positive cocci; therefore, in 88% of the patients some organism was seen in culture. This isolation rate compares favorably with

the findings of other authors,^{3,14} who have reported successful isolation of organisms in 70 and 84 per cent of the cases of bacterial endocarditis.

From those patients who eventually yielded positive blood cultures, the etiologic agent was isolated on the first attempt in 84%; the remaining successful cultures were obtained by the seventh attempt. This observation is nearly identical to the findings of Blumenthal,⁵ who noted that 86% of the positive blood cultures were obtained on the first attempt and that all of his cultures were positive by the sixth attempt. It has also been noted that in most instances a positive blood culture will be obtained in the first 48 hours.¹⁵ Hence, it is suggested that six blood cultures be obtained within the first two days.^{2,5,15}

While it can be speculated as to why five patients never yielded organisms, it is interesting that all five of them had received some form of antibiotic therapy prior to admission.

Alpha hemolytic *Streptococcus* was the most frequently isolated organism in both groups. However, this organism, alone or with another, was isolated less frequently during the latter ten years. Whereas this organism was isolated in 75% of the cases in group A, it was isolated in the latter group in only 44% of the positive cultures.

A search of the literature reveals a paucity of proven cases of bacterial endocarditis due to *Aerobacter aerogenes* and *Bacterium anitratum*. Wallace¹⁶ reported a case wherein *A. aerogenes* was isolated, and alludes to another proven case. Three proven cases due to *B. anitratum* are found in the literature.^{17,18,19}

The two cases wherein *B. anitratum* was isolated also yielded alpha hemolytic *Streptococcus*. In both instances the appearance of the organism was transient. The blood culture obtained from one of these patients could have been contaminated. The culture from the second patient, however, yielded *B. anitratum* on two separate occasions.

Endocarditis caused by coagulase negative *Staphylococcus albus* is an uncommon occurrence.²⁰ Nevertheless, the repeated

finding of this organism cannot be attributed simply to contamination. Baker and Stewart²¹ note that this organism is isolated more frequently after intracardiac surgery or cardiac catheterization.

An interesting observation is the variety of organisms isolated rather than the number of any single organism. Another interesting finding was the observation of five cases of mixed infections, each involving two organisms.

A small but perplexing group of patients in each group afforded no clue to an underlying infection. There were two and three patients in group A and B respectively whose numerous blood cultures remained negative. This finding is similar to that of Friedberg *et al*, who were unable to isolate causative organisms in 8 patients of a series of 95.²²

Other laboratory findings

An elevated corrected erythrocyte sedimentation rate (greater than 20 mm/hour) appeared in the majority of the patients; 4 in group A and 11 in group B. This finding could not be correlated with any of the other findings.

Hematuria was seen in three patients of group A and in ten of group B. It is noted that other embolic phenomena are associated with this finding in 7 of the 13 patients with hematuria. It is of some interest that of the four patients who expired, three were noted to have had hematuria.

Leukocytosis (more than 10,000 WBC/cu mm) was noted in 60% of the children. Four of the six patients in group B from whose blood *Staphylococcus* was isolated, had leukocytosis, but the leukocyte count was elevated in only three of the eight patients whose cultures yielded alpha hemolytic *Streptococcus*. Rabinovich and co-workers¹⁴ also noted that leukocytosis was more prevalent in cases of confirmed staphylococcal infection than in cases of alpha hemolytic streptococcal infection.

Anemia (hemoglobin less than normal for a given age group) was observed in 12 patients—2 in group A and 10 in group B. This finding remains puzzling in that no

correlation can be made with any of the other findings.

Physical findings

An elevated heart rate was noted in the majority of the patients. However, recalling that the pulse rate can vary widely in children, there remains only one instance of absolute tachycardia.

One or more murmurs were present in each of the patients. Murmurs were found to change in character in two and eight patients in groups A and B, respectively.

Splenomegaly was seen in half of the patients in group B but observed on only one occasion in group A. No reason for the increase in observations of splenomegaly is readily apparent. None of the four patients who expired had splenomegaly *ante mortem*.

Hepatosplenomegaly was noted on five occasions, all in group B, and in four of these patients embolic phenomena were noted.

Petechiae were an uncommon finding, noted in one and five instances in the two respective groups. Any reason for the higher incidence of this phenomenon in group B is not obvious, although it is quite possible that the observers were becoming more astute. Osler's nodes were seen on only one occasion.

Embolic phenomena in other regions of the body were thought to have occurred. In four instances embolization to the central nervous system was recorded, and it was also observed on two occasions each to the kidneys, spleen, and lungs.

Treatment and survival

The most obvious difference in the treatment of patients in group A from that in group B is that penicillin was seldom used alone in the latter group; rather, initial therapy consisted of a combination of antibiotics. It should be stated, however, that in most instances the number of antibiotics was decreased to one or two once the sensitivities were known.

Another finding was that, for the most part, large doses of penicillin when used in group B were given continuously by intravenous drip.

In all cases where organisms were identified, sensitivities were determined and were used to chart the course of therapy.

All patients who failed to yield causative organisms were treated with penicillin. Three of these patients were treated with streptomycin, and a fourth was given Aureomycin in addition to penicillin.

The survival rate of the children under discussion was 84%. This value is in close agreement with that reported by other workers (70%-84%).^{1,4,7} Even though the percentage of patients surviving in group B was better than that of group A, this difference is of little significance in view of the small number of patients observed. These findings are in sharp contradistinction to the observations made as recently¹ as three decades ago, when the mortality rate repeatedly approached 100%.^{1,23,24}

Conclusion and Summary

The charts of all patients 16 years of age or younger with bacterial endocarditis seen at NCBH during a 20-year period were reviewed. The incidence of this disease on the pediatric service remained constant, while a slight increase was noted in the total hospital population. The distribution was equal between the sexes.

Underlying heart disease was a predisposing factor in the great majority of patients: of the acyanotic type of congenital heart defects, ventricular septal defects were most frequently noted; of the cyanotic variety, tetralogy of Fallot was the most frequent example noted. Rheumatic heart disease was a factor in only six patients. An upper respiratory tract infection was the most frequently noted precipitating factor.

Blood cultures were positive in 86% of the patients; most cultures were positive on the first attempt to isolate an organism. All of the unsuccessful attempts involved patients who had had previous antibiotic therapy. The dominant organism was alpha hemolytic *Streptococcus* in both groups, though it was isolated less frequently in group B. Five patients, all in group B, had mixed infections. In recent years, there appeared to be a wider variety of organisms isolated.

An increased erythro sedimentation rate, leukocytosis, and hematuria were noted in slightly more than one half of the patients. Leukocytosis was seen more often when *Staphylococcus* was cultured.

Depressed hemoglobin values were noted in slightly less than half of the patients; for an unknown reason, nearly all low values were in group B.

A cardiac murmur was noted in every patient, changing in two and eight patients in groups A and B, respectively. Only one patient had tachycardia. Splenomegaly was observed much more frequently in group B. It is interesting that none of the patients who expired had splenomegaly. Embolization occurred in each group: central nervous system, four cases; pulmonic, two; splenic, two; and renal, two.

Treatment changed in that penicillin was less frequently given alone during the second decade and, when used, was given in much larger doses and usually by intravenous drip. A variety of antibiotics was given initially in the latter group, but was changed to a specific drug when sensitivities became known. Two patients in each group expired.

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The asthma is sometimes hereditary. It may likewise proceed from a bad formation of the breast; the fumes of metals or minerals taken into the lungs; violent exercise, especially running; the obstruction of customary evacuations, as the menses, haemorrhoids, etc., the sudden retrocession of the gout, or striking in of eruptions, as the small pox, measles, etc., violent passions of the mind, as sudden fear or surprise. In a word, the disease may proceed from any cause that either impedes the circulation of the blood through the lungs, or prevents their being duly expanded by the air.—William Buchan: *Domestic Medicine*, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 286.

The North Carolina Regional Medical Program Report of the Cancer Division

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The North Carolina Regional Medical Program in the design of its Cancer Program has the objective of developing projects which will complement existing cancer activities to form a unified, region-wide onslaught on the disease. As manpower and other resources are mobilized, each project thus becomes a part of the evolution and perfection of this comprehensive, cohesive, and functionally effective total Cancer Program.

Realistically, the ultimate goal is the prevention of cancer, but in the absence of a preventive mechanism, early detection becomes an important focal point. Diagnosis before symptoms appear should be the prime target. Thus it is the objective of the Cancer Committee of the North Carolina Regional Medical Program to facilitate the expeditious dissemination to all physicians of new information uncovered in the medical centers pertaining to early diagnosis and management of cancer. Cancer patients throughout North Carolina must have the same optimum degree of diagnosis and treatment that is delivered in the larger hospitals and medical centers. In this context it is recognized that information, vital to the attainment of these goals, can be delivered by different modalities, such as consultative services, cancer conferences and seminars, clinical training programs, distribution of literature, screening clinics, and the feed-back of data from cancer registries.

The Cancer Committee recognizes that for such a program to be successful, involvement of physicians, community hospitals, medical teaching centers, and patients is essential. Only by such involvement, together with ab-

solute cooperation, can the early diagnosis and treatment of *all* patients afflicted with cancer become a reality. Such is the philosophy of North Carolina's Regional Medical Program. The plan is to develop projects which will augment one another and function together as well as individually.

As an integral part of the initial phase of planning, a Cancer Task Force was activated—now known as the Cancer Committee. This group was composed of representatives of agencies, institutions, and organizations in North Carolina involved in the diagnosis and delivery of care to cancer patients. The Cancer Task Force includes representatives from the Duke University School of Medicine, the University of North Carolina School of Medicine, the Bowman Gray School of Medicine, the Medical Society of the State of North Carolina, the North Carolina Division of the American Cancer Society, the American College of Surgeons, the North Carolina Board of Health, the Governor's Commission to Study the Cause and Control of Cancer in North Carolina, the North Carolina Hospital Association, the School of Dentistry of the University of North Carolina, the North Carolina Nurses' Association, the North Carolina Society of Pathologists, and the North Carolina Society of Radiologists.

One of the chief functions of this committee is to review and make recommendations concerning new cancer proposals, to review renewal applications of existent operational cancer projects at the completion of their funding phase, and to review operational cancer projects annually, in order to determine whether these projects are accomplishing their stated objectives and therefore whether they warrant continued funding.

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This committee meets quarterly, and, in reality, is the nucleus and catalyzing agent of the entire cancer program.

Under the guidance of the Cancer Task Force, now known as the Cancer Committee, the following projects have been developed and are now operational.

I. Central Cancer Registry

The Cancer Task Force decided that the development of a Central Cancer Registry for North Carolina should receive first priority in the evolution of the Cancer Program.

For years the need for a more effective Cancer Registry Program has been recognized. Individual registries existed in hospitals scattered over the state, but the great majority were of little value. The failure, to a large degree, was due to the fact that they were simply data-collecting devices, with no development of meaningful feed-back to the reporting hospitals and physicians. To be successful, a cancer registry must return meaningful information to those who cooperate in supplying the data. The development of careful and thorough follow-up mechanism for patients in the registry is likewise a necessity. The Registry Task Force was cognizant of these facts, and thus the group was well prepared in its undertaking.

The prime motivating force behind the establishment of a Central Tumor Registry in North Carolina has been the need for an educational tool to aid the practicing physician in the care of the cancer patient. The Registry also furnishes a guide to local community agencies for their public and professional education programs and other cancer control activities. Likewise, it supplies data concerning the prevalence and incidence of various types and sites of cancer, which may prove invaluable to epidemiologists and statisticians for research purposes. And finally the program serves patients by assuring periodic follow-up examinations for life. Early recognition of local recurrences and metastasis is thus facilitated.

As stated in *Approved Cancer Programs*, a pamphlet edited by the American College of Surgeons (1968): "Experience has shown that without a registry, follow-up of the

cancer patient is poor, educational information is lost, conclusions as to end results of therapy are erroneous, and the patient is ultimately the loser."

Initially, ten hospitals in North Carolina were selected to participate in the program, either because of their interest in the endeavor or because they had individual registries already in existence. Ultimately it is planned that the Central Cancer Registry will embrace all hospitals and physicians in North Carolina desiring to participate.

Experience gained in the first 12 months of operation of the Registry has been invaluable. The initial abstract form developed by the task force has been revised and refined. Computer problems are being solved. The initial ten participating hospitals have been cooperative. In the first nine months of the existence of the Registry, roughly 2,500 abstract forms have been completed by these hospitals. Feed-back of information to physicians and hospitals is underway. A thorough follow-up format has been developed, since an essential component of the Registry is to remind both the physician and the patient that it is time for re-examination.

Representatives of the North Carolina Board of Health and the North Carolina Regional Medical Program are working closely in the development of the Registry; ultimately the State Board of Health will maintain it. The Board of Health will receive reports from the hospitals, store data, and provide a retrieval system and routine reports. The North Carolina Regional Medical Program will continue to support the educational aspect of the Registry, including special requested reports to physicians and hospitals. The computer aspect of the Registry will be the responsibility of the Board of Health.

The North Carolina Division of the American Cancer Society has been a willing contributor to the program. Several of the ten hospitals participating are being financially subsidized by the society. These subsidies range from salaries paid to clerical personnel who are abstracting the hospital patient records, to equipment and supplies for the

maintenance of the registries in the hospitals.

The Committee on Cancer of the Medical Society of the State of North Carolina has contributed greatly to the program by providing liaison between the Society and the Central Registry.

A consultant from the American College of Surgeons has been most helpful to the Cancer Committee in the development of the Registry, as have been Liaison Fellows of the Commission on Cancer.

The North Carolina Regional Medical Program wishes to expand the Registry to encompass those hospitals that have expressed an interest in participating. The present plan is to accept new hospitals in early 1970. Inquiries should be directed to the North Carolina Regional Medical Program, 4019 North Roxboro Road, Durham, N. C. 27704.

II. Cancer Information Service

The second project initiated by the Cancer Task Force is the Cancer Information Service. This project was designed to provide immediate information on any cancer problem via telephone to physicians in North Carolina who requested such information. The inquiring physician needs only to pick up a telephone, dial the Cancer Information Service via a specific number at any one of the three medical schools in North Carolina, and state his problem (at no cost to himself). Specialists in various types of cancer are available on call at the medical schools.

The specific telephone numbers at the three medical schools are: Duke University, (919) 684-5555; University of North Carolina, (919) 966-1388; Bowman Gray School of Medicine, (919) 724-0233.

A secretary is employed to answer the telephone from 8:30 A.M. to 5:00 P.M., and an answering service handles the calls during the evenings and week-ends. The call is transferred to a physician in the specialty best suited to deal with the question. Medical center consultants donate their time to the project, and there is no consultant fee.

It was felt that the ready availability of answers through this service would greatly improve cancer treatment in North Carolina. The aims are: (1) to assist the prac-

ticing physician in providing optimum care of patients with cancer, and (2) to continue the education of physicians by giving new information from a patient-centered experience.

According to the initial plan, each medical school unit serves a particular portion of the state. Physicians in Eastern North Carolina seek information from Duke, those in Central North Carolina from UNC, and those in Western North Carolina from Bowman Gray. It was understood, however, that the program would be flexible in this respect.

The rationale for a rapid information service is that an immediate answer to a pertinent, patient-centered question results in maximum retention of the new information acquired by the inquiring physician.

From May, 1968 to September, 1969 there were 201 calls utilizing the Cancer Information Service. Calls have been received from 59 cities in North Carolina and five neighboring states. There has been a steady increase in the number of calls as the service has become known through letters, brochures, and other types of publicity.

This project has been conducted in close collaboration with the Library Extension Project of the North Carolina Regional Program, which has aided in compiling bibliographies and reprints on cancer for distribution to questioning physicians.

An ancillary pilot project has been initiated by Dr. James Bryan, coordinator of the Cancer Information Service at the University of North Carolina School of Medicine. Bibliographies and reprints have been supplied to 53 physicians who have sent specimens on which a diagnosis of cancer was made by the Pathology Department of the University. The response was favorable. This pilot project will be fully evaluated at the end of a year, with the possibility that the other two medical schools in the state will render a similar service.

III. Coordinated Oncology-Chemotherapy Project

This project was designed to meet a critical need for a continuing education program in cancer chemotherapy for physicians. It is a demonstration of specific plans of

therapy which may be followed by the physician with coordinated guidance by a group of oncologists.

The proposal was initiated by the Bowman Gray School of Medicine and is now operational under the supervision and guidance of this institution. The program utilizes the basic concept of clinical education: that the physician is motivated to learn by working with his own patients under consultative guidance. This guidance will be supplied by the Oncology Center of the Bowman Gray School of Medicine. As stated in the proposal: "The program will have a specific impact on the medical profession in promoting a cooperative venture between the faculty-medical school specialist working with neoplastic disease, the staff of community hospitals, the practicing physician and his patient."

Again quoting from the proposal: "This program for the treatment of patients with neoplastic disease is designed to evolve and supervise plans of therapy initiated within the medical center, but carried out by the family physician utilizing standardized therapy protocols and methods of English language computer-recording of data which permit accuracy and availability of data."

At present 20 physicians in community practice are working with the staff of the Oncology Center of the Bowman Gray School of Medicine in the care of patients on the following four protocols:

1. Systematic sequence of therapy for carcinoma of the breast.
2. Adjuvant and prophylactic chemotherapy in carcinoma of the colon.
3. Combination radiation-chemotherapy treatment of carcinoma of the lung.
4. Protocol for the study of optimum therapy for ovarian carcinoma.

Included in these four studies are now 39 cases of carcinoma of the breast, 37 cases of carcinoma of the colon, 44 cases of carcinoma of the lung, and 13 cases of carcinoma of the ovary.

The attitudes of physicians toward participation in the guided therapy program and the growth of this program will be appraised at annual conferences planned to re-

view the program with the participating and other interested physicians.

As a result of this program it is hoped that cancer patients will receive what is thought to be optimal chemotherapy without having to go to a medical center for continued care.

Approximately 100 to 150 patients are expected to be entered upon this program during the first year. Early cases have come from counties surrounding the Oncology Center. Physicians and others in both the eastern and western areas of the state have expressed interest and are expected to participate in coming months. Discussions with medical societies and community hospital staffs are planned, to orient them into this type of oncologic care. As new plans of chemotherapy develop, the program will be adjusted to incorporate them in the treatment of patients. The course of individuals on the treatment program and those not exposed to chemotherapy will be evaluated at an annual conference with participating and other interested physicians. Patients with hematologic malignancy have been treated under a similar program within the Medical Center under the auspices of a collaborative group (Leukemia Group B), in which the Bowman Gray School of Medicine has participated since 1958.

IV. Regional Mammography Training Program for Technologists

The Mammography Technologist's Training Project was initiated by the Radiology Department of Duke Medical Center. The objectives of this project are threefold:

1. To provide a qualified technologist to act as a technical consultant in mammography as a diagnostic tool in breast disease.
3. To provide this service to all interested medical institutions and community hospitals in North Carolina.

A registered radiologic technologist, with extensive training in mammographic techniques and additional training in mammography interpretation, is available to travel, teach, and act as a technical consultant for the North Carolina Regional Medical Program. She is under the direct supervision of the Duke Mammography Project radiol-

logist, who works closely with the Regional Medical Program in deciding the need and proper time for her services.

Each hospital administrator and radiologist in North Carolina has received written information concerning this program. The importance of mammography as a valuable diagnostic tool in breast disease has been emphasized. The training program has been explained in detail, and they are asked to simply complete a questionnaire.

Initially a one-day visit to a hospital which has expressed an interest is made by the project technologist. The purpose of this meeting is to evaluate the existing equipment and provide the information needed to perform satisfactory mammography. Once the department is prepared to perform mammography, the technologist returns to the hospital for an intensive three-day training course. This includes lectures, tapes, slides, and practical demonstrations. Each radiologist is asked to spend some time with the project radiologist studying mammographic interpretation. This can be arranged at either the community hospital or Duke Hospital.

Statistics from the period June 1 through November 1, 1969 are encouraging. Eleven radiologists have been trained at their hospitals, and 91 technologists have received training in mammographic technique.

This program is available to all interested radiologists and hospitals in North Carolina, and it is hoped that it will be increasingly utilized.

V. Tumor Board Conferences

The objective of this proposal is to establish tumor boards in community hospitals in North Carolina and to supplement these boards with cancer information from appropriate physician-consultants in the medical schools by means of two-way telephone conferences. It was decided, however, to initiate this proposal as a pilot project, utilizing one community hospital and one medical school for a period of six months. New Hanover Hospital, Wilmington, North Carolina and Duke Medical School were selected as the initial participants.

On November 4, 1969 the initial conference was held in Wilmington, with a total of

20 participants. In the opinion of those present at the conference and of the participants at both hospitals, it was a great success. Subsequent conferences likewise have been received most enthusiastically.

The composition of the community hospital tumor board will include a surgeon, gynecologist, internist, radiologist, pathologist, and a coordinator. These physicians will be from the medical staff of the participating hospital. Appropriate consultants for the cases presented will be selected at Duke Hospital. Medical center consultants are donating their time to the project, and there is no consultant fee.

The selection of community hospitals to participate in the project in the future will be guided by (1) the desire by the medical staff to participate, and (2) the volume of patients to justify regular conferences. The cases to be discussed by the Tumor Board are: (1) all service (staff) patients with malignant disease or suspected malignant disease in the community hospital, (2) any private patient, if requested by the attending physician, (3) cases from the area on request by the attending physician (not necessarily associated with the community hospital).

The tumor board in the community hospital will meet weekly to discuss pertinent cancer cases. Every other week there will be participation with the medical school via telephone. The day and time of the two-way conferences can be negotiated between the medical school and community hospital.

Several days prior to the telephone conference, the coordinator in the local hospital will prepare abstracts of the case histories of the patients to be discussed. He will then notify the coordinator at the medical school, so that specialists appropriate for the problem may be alerted. The two participating coordinators may desire to discuss what further clinical information is needed for the conference.

Both diagnosis and therapy may be discussed at meetings of the tumor board. Participation in these conferences will be open to all interested physicians and not limited to regular members of the Tumor Board.

Experience thus far gained indicates two facts:

1. It will take strong motivation by the physician coordinating the program at the community hospital level to keep this activity ongoing. Roughly, four hours are required per conference by the physician. Of these, one and one-half hours are necessary to select and summarize the cases, one hour for participation in the conference, and one and one-half hours to listen to the reply of the taped conference in order to dictate a summary.

2. The conferences are useful, especially for the house staff, and an effort is being made at the New Hanover Hospital to index and duplicate the summaries and thus make them available to those of the house staff that desire them.

The pilot project with New Hanover Hospital is planned for six months. At the completion of this period the project will be evaluated. If the pilot endeavor proves successful, an effort will be made to extend the undertaking to other community hospitals and to the three medical schools in North Carolina. The possibility of closed circuit television will be seriously considered.

VI. North Carolina Tumor Tissue Registry

Based on the realization that pathologists serve an essential function in the field of oncology, that their decisions may be critical in determining the mode and extent of therapy, and that consultation with other pathologists is often urgently needed in difficult tumor cases, the establishment of a Tumor Tissue Registry in North Carolina was proposed to the North Carolina Regional Medical Program by Dr. Herbert Lund of the Moses H. Cone Hospital in Greensboro. This proposal was endorsed by the Section on Pathology of the Medical Society of the State of North Carolina, and the project became operational on July 1, 1969.

An increased experience in tumor-diagnosis consultation in difficult cases, and continuing education in oncology, can be offered by a Tumor Tissue Registry on a local basis.

The chief objectives of the North Carolina Tumor Tissue Registry are:

1. To sponsor and aid in establishing a repository of tumor tissues, microscopic slides and photographs.
2. To catalog and index tumor material.
3. To prepare slides, abstracts and critical evaluations for distribution to pathologists and other physicians on request.
4. To offer consultative services on tumor diagnosis and classification, without charge to physician or patient, to pathologists throughout North Carolina.
5. To foster seminars on tumors.
6. To offer aid to medical schools and hospitals in resident training in oncology.
7. To collaborate with the Central Tumor Registry and the Cancer Information Service of the Regional Medical Program on matters of tumor diagnosis and classification.

The facilities of the Moses H. Cone Hospital in Greensboro, North Carolina are being utilized as the site of the Tumor Tissue Registry.

A progress report of this project on November 19, 1969 revealed:

1. Sixty-seven pathologists are registered with the central office.
2. A store of cases to be distributed is being accumulated. Slides are being cut from each block contributed. In most instances such slides can be kept by individual pathologists.
3. Eighty-five cases have been contributed to the registry and are in preparation. Hopefully, a backlog of 125-150 cases will be prepared before the first of weekly dispersments begin on February 1, 1970. With the slides will be a clinical abstract and critical evaluation of diagnostic features shown in the slides.
4. Secretarial duties are being handled satisfactorily.
5. Some difficulty has existed in the technical part of the project in that a scarcity of technicians exists.
6. Plans are being made to secure a guest speaker or moderator on any subject pertaining to tumors at the May, 1970 meeting of the Medical Society of the State of North Carolina.

VII. Trophoblastic Cancer Project

The objective of this project is to aid the Southeastern Trophoblastic Center at Duke University Medical School in the development of a new method of diagnosis of trophoblastic neoplasms. This is a radioimmunoassay of human chorionic gonadotropin (HCG).

Abnormal proliferation of the trophoblastic cells of the human placenta, "trophoblastic neoplasia," occurs in approximately 1 of 2000 live births in the United States each year. These neoplasms may arise from term pregnancy, abortion, or hydatidiform mole. Less commonly, similar tumors may arise from embryonal elements in the ovary, testes, or elsewhere. Any of the several histopathologic types (hydatidiform mole, choriocarcinoma or chorioadenoma destruens) may persist despite repeated uterine evacuation or other surgical removal, or progress to malignant forms.

Malignant varieties of trophoblastic neoplasm usually occur in young women, for whom the prognosis is uniformly grave unless diagnosis is prompt, therapy is rapidly and thoroughly instituted, and follow-up is efficient. Peripheral dissemination of the tumor is usually rapid, primarily by the hematogenous route. Widespread metastases mark the patient with late disease.

From 1956 to 1966 the diagnosis and treatment of patients with trophoblastic neoplasms were studied by physicians of the National Cancer Institute. In a series of 196 patients, the curative effects of certain chemotherapeutic agents (methotrexate and actinomycin—D) were demonstrated. It was found that 98% of patients with non-metastatic disease (confined to the uterus) and up to 80% of patients with metastasis can achieve complete sustained remission. These high rates of success, however, are dependent upon early diagnosis and the immediate and vigorous institution of potentially lethal chemotherapy. The importance of a technique or method of early diagnosis is thus extremely important.

Fortunately, patients with these tumors (benign or malignant) secrete a hormone, human chorionic gonadotropin (HCG),

which can be precisely measured in blood and urine. Use of various assays for HCG can provide more rapid diagnosis as well as an effective method to monitor effects of therapy.

In 1966 the Southeastern Regional Center for Gestational Trophoblastic Neoplasms was established at Duke University and provided with funds for consultative service to aid community physicians in diagnosis and therapy of these patients through routine immunologic and sophisticated biologic assays for HCG. From September 1, 1966 through February 2, 1968, 167 patients were actively screened by the center, and of this number 137 patients were found to have trophoblastic neoplasm. The demand for service rose dramatically, and as the work load continued to rise rapidly, a need for the center to expand its assay capability became apparent. Best results of therapy are quite dependent upon the reliability and rapidity of HCG determinations. It was realized that if the center was to achieve these goals, newer assay methods were necessary.

In the past several years a new and sensitive radioimmunoassay has been developed for the detection and quantification of HCG. The specificity and precision of this radioimmunoassay is well documented, and it has now become clinically available through the Southeastern Center at Duke Medical Center for use in the management of patients with trophoblastic neoplasms.

The center now is in the process of developing rapidly the radioimmunoassay for HCG, comparing it with more routine immunologic and biologic HCG assays, and determining its role in the care of patients with trophoblastic neoplasms. If detailed comparisons prove radioimmunoassay to be as precise, rapid, and sensitive as all preliminary data suggest, the center will be able to provide better assistance to the physician and to a larger number of patients in less time.

It is hoped that physicians in North Carolina will utilize this facility as an aid not only in the diagnosis of patients with suspected trophoblastic neoplasms, but also in the monitoring of the effects of therapy.

Since this project became operational, the initial steps have consisted of purchasing the necessary instrumentation and developing the laboratory technicians' capabilities and techniques necessary for this assay. In addition, numbers of biologic specimens from patients with proven trophoblastic disease and controls have been obtained, cross-filed and prepared for assay. Development of a suitable antibody has been initiated. It is anticipated that the assay will be fully operational by the spring of 1970. Throughout this phase of the project, the Southeastern Center has continued to provide other assays of urinary gonadotropins for more than 100 patients suspected of having trophoblastic disease. More than 25 of these patients have been found to have trophoblastic neoplasms requiring therapy, and response rates continue to be good.

VIII. Cancer Conferences

1. On April 10-11, 1969 a conference on "The Lymphomas" was held at the North Carolina Memorial Hospital, Chapel Hill. This conference was sponsored by the United States Public Health Service Clinical Cancer Training Grant, the North Carolina Regional Medical Program, the North Carolina Division of the American Cancer Society, and the University of North Carolina School of Medicine. There was a two-day discussion of Hodgkin's disease, reticulum cell sarcoma, and lymphosarcoma by five distinguished physicians. In addition there was a discussion of the Central Cancer Registry and the Cancer Information Service Projects of the North Carolina Regional Medical Program.

Subsequently, staff members of the North Carolina Regional Medical Program performed a follow-up survey of the conference. Questionnaires were sent to 15% of those physicians who attended. Virtually all of those responding characterized the conference as excellent. The majority felt also that the speakers were very good, and that the information gained by those in attendance had a profound, positive effect on their professional capability.

2. On April 30-May 2, 1969 a symposium was held at Duke University Hospital on "Problems and Progress in Cancer Control."

This meeting was co-sponsored by the Duke University School of Medicine and the North Carolina Regional Medical Program. This symposium was intended for practicing internists, radio-therapists, surgeons, and oncologists. Problems related to environmental health and carcinogenesis and matters relating to the early detection of cancer were presented. Discussion also included the biochemical characteristics of tumor cells, clinical effects of hemolysis and hormone production, and the mechanism of action of useful anti-tumor agents. A series of patients was presented to illustrate established principles of chemotherapy agents. The faculty included 20 members of the Duke Medical School staff, three out-of-state physicians, and one physician from Sweden.

The quality of presentations was superb. Many attending physicians requested that similar sessions be held in the future.

IX. Continuing Education in Dentistry

It has been statistically stated that oral cancer accounts for 5% of all malignant neoplasms. Approximately 50% of these problems are currently diagnosed by dentists. Dentists, therefore, should be provided with the most current information and techniques regarding early cancer detection. A project designed to deliver this information through continuing education programs in community hospitals in North Carolina is now in the planning phase and should soon be operational. The UNC Schools of Dentistry and Medicine will serve as the primary bases for the development of this project.

Oral-facial rehabilitation of the patient who has undergone surgery or radiation therapy for treatment of cancer is to a significant extent a dental problem, and a portion of the project will be devoted to this area. Significant improvement in prosthetic replacement of missing parts has occurred in recent years, and the skills of the dental profession in this area of treatment should be appropriately utilized. It will be pointed out that this type of specialized treatment is presently being done at UNC School of Dentistry and that the dentists throughout the state can utilize this service.

Six community hospitals over the state have been selected for the continuing education programs which started in January, 1970, with oral cancer being but one of eight categories which will be stressed. However, more time will be devoted to oral cancer than any of the other categorical diseases.

X. Lincoln Hospital Cancer Detection Program

Physician representatives of Lincoln Hospital, located in a predominantly Negro area of Durham, expressed the need for a Cancer Detection Clinic at that hospital. The North Carolina Regional Medical Program acted as a catalyst to bring together various groups and agencies involved in cancer activities to develop the endeavor. As the result of the several relevant organizations working in unison, the clinic has become a reality.

The clinic meets weekly at Lincoln Hospital and screens patients for cancer of the cervix, breast, and colon. Chest x-ray examinations are available at the local health department. North Carolina State Board of Health funds are used to underwrite the center than any of the other categorical clinic costs. The Department of Health Education at North Carolina Central University is working with the state and local cancer societies and with the Office of Economic Opportunity in community organization and health education for the target population.

Through North Carolina Regional Medical Program initiative in response to a request, the clinic is a reality and a need is being met, utilizing the cooperation of many people and agencies in a common cause.

Plans for the Future

To date, all organizations and activities in North Carolina involved in the field of cancer have been most cooperative with the North Carolina Regional Medical Program. As a result of this unified effort, the Cancer Program now involves a great proportion of North Carolina physicians, the three univer-

sity medical centers, many community hospitals, state-wide organizations and agencies, the nursing profession, paramedical personnel, and above all an increasing number of patients. For the Cancer Program to exist, achieve and expand, this liaison must continue.

We realize that our program today is sorely lacking in certain areas. Greater emphasis on early diagnosis is needed. More nurse involvement is necessary. The use of training grants and cancer research facilities at the three university medical centers for postgraduate training in cancer for physicians in North Carolina should be explored. The important role of radiation therapy in the care of the cancer patient should be emphasized. Efforts will be made to overcome these relative deficits in our program.

In order to reach our goal of making available the best known care to the individual cancer patient, the application of the expert knowledge of physicians in many different disciplines is required. This multi-disciplinary approach includes surgery, internal medicine, pathology, hematology, radiology, radiation therapy, and chemotherapy. Our program should be both multi-disciplinary and inter-disciplinary in all areas of planning, programming and action.

As Dr. Sidney Farber, past president of the American Cancer Society, aptly stated in the November-December, 1968 issue of *CAA Cancer Journal for Clinicians*:

"When the Regional Medical Programs add new resources to those already provided by the community, all community hospitals which qualify will be able to mount stronger inter-disciplinary programs in behalf of the patient with cancer. They will be aided by diagnostic assistance and therapeutic advice when needed and by programs of continuing education in oncology from regional centers created for this purpose."

The Cancer Committee of the North Carolina Regional Medical Program actively subscribes to this point of view and adopts it as a major focus for continued efforts toward optimum detection, care, and control of cancer.

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APRIL, 1970

THE HIMLER REPORT

One of the most important matters to be taken up by delegates to the May meeting of the State Society is the so-called Himler Report, actually the report of the AMA's Committee on Planning and Development. It created controversy when it was presented to the AMA House of Delegates at the Denver clinical meeting last December. It will create controversy in any group where it is considered, and its history of controversy begins within the committee, which wound up issuing a minority report as well. The recommendations of this report appear on page 157 of this issue of the JOURNAL and

are enough to indicate why many people are agitated by the document. Every member of the Society is urged to read them; it takes little time. A full copy of the report has already been sent to every delegate as well as to other local society officers.

All of us like to hope that we will have a future individually, and our individual future, like it or not, is bound to that of medicine in general. This general future is what the Himler report is all about, so let your delegates know your views concerning this matter.

COMMERCIAL BLOOD BANKING

For some years now, a few of the larger cities of our state have had blood donor stations where blood is collected largely for shipment to other states. There has been no major commercial selling of blood in the state. Activity has picked up recently, however, and the Committee on Health of the Legislative Research Commission held a hearing to which interested parties, including the state medical society, were invited. In question is a proposed law to regulate commercial blood banking activity in the state. Another piece of proposed legislation would consider ruling that blood and other tissue transplants are not to be considered commodities, subject to the usual laws of warranty. This editorial deals only with commercial blood banking problems.

Blood transfusion is the oldest form of tissue transplantation, and the most successful thus far. Since there is no way to manufacture artificial blood, healthy people must supply the blood that is necessary to save thousands of lives each year, and to make modern treatment, medical and surgical, possible in many instances. There is a tremendous, and increasing demand for blood. Unfortunately, it is difficult to control the quality of blood donated for transfusion. There are some tests that can be done to give partial protection to both donor and recipient, but they are limited to determining whether the prospective donor is anemic, is free of syphilis, and has normal temperature, pulse, blood pressure, and weight.

A great deal of reliance has to be placed on statements made by the prospective donor. There is no way to tell if such a person has

recently been in a malarious area, or has had hepatitis, or is taking drugs, perhaps intravenously. Each of these situations may indicate that the blood is not suitable for transfusion. It is human nature, perhaps, to be inaccurate in answering the questions asked of blood donors when the donation is being made for money; the objective of the donor is to earn money, and he will do all he can to get that money. A volunteer donor trying to render service to some needy person presumably will be more cautious in answering questions. Those active in blood banking, however, know that there is an element of bravado in some volunteer donors, and that they, too, may answer questions inaccurately to ensure their donation; fortunately, this practice is not widespread. Some donors do just the opposite, answer in a way calculated to disqualify themselves. There is no way to ensure truthfulness.

What all this means as far as proposed legislation is concerned is that blood donation in the state should conform to the highest possible standards, designed to protect both donor and recipient. Federal licensure, necessary for shipping blood in interstate commerce, does not require that a physician be available in the donor room area, as the Red Cross does. Many commercial blood banks do not even have a physician in the same state as their donor stations, which are often in the more run-down parts of our cities.

The presence of a physician who has daily duties with the blood bank improves performance of blood bank personnel through constant observation and checking of their duties. When questions arise concerning a donor, the physician can immediately respond. His medical training and experience may lead him to disqualify a donor when answers are equivocal, and any doubt that arises should result in exclusion of such donors. When a donor experiences an unfavorable reaction to donating blood, as a small percentage do, the physician can supervise treatment; such reactions can be alarming and serious. A minimum requirement of the law should be that a physician be available on the premises of the blood bank whenever donor blood is being drawn, and available at all times for

consultation.

Any regulatory legislation for blood banks should indicate (1) the provision of standards for their operation which would be continuously updated as new knowledge became available, and (2) a mechanism for enforcing the application of the standards. The law could assign these functions to some state agency, which would likely prove expensive and difficult to staff. Or the law could recognize existing standards and inspection mechanisms as meeting the needs of the state.

In the public area, at least two groups are currently promulgating standards and carrying on inspections. The first is the Division of Biologic Standards of the National Institutes of Health, which concerns itself only with blood banks engaging in interstate transportation of blood. Its standards are restricted to blood donation and do not pertain to procedures involving the recipients of blood. The Division does have standards for the materials used in blood banking, such as the blood containers and the typing serums, and it has laboratories and people to test these things. The second group is the American Association of Blood Banks (AABB), a private organization of nonprofit blood banks. Its standards are broader than the federal ones, including patient-related matters, and are continuously revised by a committee of experts. Federal standards for certain supplies and reagents are accepted by the AABB standards committee. Another committee of the organization maintains an inspection and accreditation mechanism, with more than 1,000 banks currently accredited. Non-member banks can apply for inspection and accreditation, and many do. The inspectors are volunteers, and receive only reimbursement of their expenses. The Red Cross has its own standards, but does not apply them outside its own blood centers.

Difficult though it may be, the law concerning commercial blood banks should be written with an eye to the future, when organ transplantation becomes feasible. If the volunteer blood donor principle be eroded in this state by the advent of large scale commercial blood banking, is it not conceivable that organ brokerages might some day be established through which people

could arrange to sell a kidney or an eye or a few inches of blood vessel? The idea is repugnant, yet not essentially different from being paid to donate blood. It can be argued that there is nothing wrong with such acts, but is enabling legislation in the public interest? Would it not be best to prohibit the sale of human parts, dead or alive? Unwilling though one may be to interfere with free enterprise, no one wants to see a return to practices of the era before anatomy laws became standard around the world, when cadavers were obtained through illegal means, including murder.

There is no murder connected with commercial blood banking, but there is a strong suggestion that the class of people who

give blood for money at least bear a higher incidence of hepatitis virus in their blood, and sometimes this disease is fatal to the already weakened people who get blood. Should we legalize this temptation to our people?

Thus far, the state of North Carolina has done reasonably well with a nearly 100% volunteer of blood donation system. It needs expansion, but it is basically sound. Any commercial blood operation should provide blood of equal quality for equal or lesser cost. It is hard to see how this would be possible, and strict legislation is needed to see that there is no compromise with standards to the extent that legislation can do such a job rather than medical or scientific conscience.

Correspondence
THE GORDON MEDICAL
SCHOLARSHIP PROGRAM

To the Editor:

The Gordon Medical Scholarship Program is an effort to create as many \$5,000 Medical School scholarships as possible donated by physicians and others through the County Medical Societies (see *American Medical News*, Dec. 1, 1969, p. 3; *Modern Medicine*, Dec. 15, 1969, p. 64; *Rocky Mountain Medical Journal*, Dec. 1969, p. 4; *North Carolina Medical Journal*, Dec. 1969, p. 502; *Medical Annals of the District of Columbia*, Jan. 1970, p. 68).

I am very pleased to announce that the first \$5,000 Medical School Scholarship in my national campaign to be awarded was donated by the husband-wife medical team of Dr. Anderson Nettleship, Senior Research Associate and Dr. Mae Banwell Nettleship, Director, Antaeus Lineal Research Associates, P.O. Box 817, Fayetteville, Arkansas 72701. Dr. Anderson Nettleship is Chief of Laboratories, Veterans Administration Hospital, Fayetteville, Arkansas.

The recipient of the Nettleship Scholarship is Mr. Nicholas P. Lang who is a first-year student at the University of Arkansas School of Medicine. The award has been made through the auspices of the Washington County Medical Society, Fayetteville, Arkansas.

I have received hundreds of letters about "The Gordon Medical Scholarship Program." Each donor receives his "Certificate of Meritorious Service to the Future of Medicine in America" by contributing \$5,000 to his local Medical Society and thus making it possible for one of his area's worthy but financially deprived premedical students to attend Medical School.

No guarantee of repeat contributions is requested although I disclaim any responsibility if the donor gets hooked as I have on the joys of healing the ills of society and advancing our profession in this wonderful way.

If the donor's County Society has not yet arranged with I.R.S. to accept tax-exempt contributions, the \$5,000 can be given directly to the Medical School through the auspices of and by arrangement with the County Society.

Maurice B. Gordon, MD.
9917 Atlantic Avenue
Ventnor, N. J. 08406

Ten thousand dollars worth of broad-spectrum antibiotic medications and ready-to-use infant feeding formula have been flown and shipped to Nigeria, to assist in the Nigerian government's current program to rehabilitate victims of the recent Biafran conflict. The products--the antibiotic EVRAMYCIN (R) and S-M-A (R) Ready-to-feed infant formula--were donated by Wyeth International Limited, the overseas arm of Wyeth Laboratories, Radnor, Pa., pharmaceutical manufacturer.

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹; NORTH CAROLINA,
JANUARY 1970 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE				NONWHITE				COUNTY	WHITE				NONWHITE						
	Perinatal Deaths		Total Deliveries Feb. 1969 - Jan. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Feb. 1969 - Jan. 1970	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries Feb. 1969 - Jan. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Feb. 1969 - Jan. 1970	Perinatal Rate Per 1,000 Deliveries			
	January 1970	February 1969 - January 1970			January 1970	February 1969 - January 1970				January 1970	February 1969 - January 1970			January 1970	February 1969 - January 1970					
NORTH CAROLINA	157	1894	67401	28.1	109	1334	26158	47.4												
ALAMANCE	3	51	1295	23.8	2	26	454	57.3	PENDER		6	119	50.4	1	6	140	42.8			
ALEXANDER		14	332	42.2			34	-	PERQUIMANS			65	-		2	50	-			
ALLEGHANY		3	143	-			6	-	PERSON		10	276	36.2		9	194	46.4			
ANSON		4	154	-	3	18	292	61.8	PITT	1	18	744	24.2	2	37	666	53.8			
ASHE	2	8	325	24.6			1	-	POLK	1	3	114	-		3	37	-			
AVERY	1	10	233	42.8			4	-	RANDOLPH	6	53	1247	26.5	1	4	147	-			
BEAUFORT		10	388	25.8	2	9	251	35.9	RICHMOND	1	18	469	38.4		16	289	65.4			
BERTIE		7	95	-		15	260	67.7	ROBESON	2	21	553	38.0	4	98	1444	40.2			
BLADEN	1	3	234	-	1	11	222	49.5	ROCKINGHAM	1	34	998	34.1	1	17	404	42.1			
BRUNSWICK	9	256	35.2			5	157	31.8	ROWAN	3	28	1142	24.5	1	16	307	52.1			
BUNCOMBE	3	56	2073	27.0	3	13	274	47.6	RUTHERFORD	2	17	750	22.7		10	158	72.5			
BURKE	1	30	950	31.6		2	90	-	SAMPSON	1	12	404	29.7	7	26	339	76.7			
CABARRUS	2	52	1059	30.2	14	274	51.1	SCOTLAND	1	16	305	52.5		13	294	44.2				
CALDWELL	7	44	1138	38.7	7	104	87.3	STANLY	18	593	30.4		2	131	-					
CANDLER		3	56	-		1	31	-	STOKES	12	309	38.8		1	59	-				
CARTERET	2	20	511	39.1	1	2	71	-	SURRY	3	54	892	38.1		6	62	-			
CASWELL		2	141	-		12	174	69.0	SWAIN	1	3	100	-		1	71	-			
CATAWBA	3	43	1505	28.6	8	224	35.7	TRANSYLVANIA	12	291	41.2		1	24	-					
CHATHAM	3	308	-		8	174	46.0	TYRRELL		29	-			2	27	-				
CHEROKEE	1	6	316	19.0	3	12	-	UNION	1	18	722	24.9	1	9	268	33.8				
CHOWAN		1	92	-		3	80	-	VANCE		6	330	18.2	2	25	383	65.3			
CLAY	1	5	101	49.5			1	-	WAKE	3	69	3052	22.6	1	55	1143	48.1			
CLEVELAND	4	27	982	27.5		22	424	51.9	WARREN	2	53	-		2	5	144	34.7			
COLUMBUS	1	15	506	29.6	3	21	334	63.1	WASHINGTON	5	131	38.2		1	9	156	57.0			
CRABEN	1	32	1193	26.8	1	21	363	54.8	WATAUGA	2	13	378	34.4			4	-			
CUNBERLAND	15	108	3716	29.1	3	64	1364	46.8	WAYNE	2	22	1108	19.9	3	36	561	64.2			
CURRITUCK			56			2	31	-	WILKES	2	25	818	30.6			56	-			
DARE	2	3	108	-			9	-	WILSON	1	20	531	37.7	2	25	598	41.8			
DAVISON	5	51	1446	35.3	3	14	248	58.5	YADKIN	6	354	16.8			2	32	-			
DAVIE	1	6	279	21.5		3	62	-	YANCEY	6	204	28.4			6	-				
DUPLIN	7	387	18.1		1	14	303	46.2	CITIES								City totals are also included in county totals			
DURHAM	31	1443	21.5		3	39	971	40.2	ALBEMARLE	1	138	-		1	45	-				
EDGEcombe	9	411	21.9		1	23	580	41.8	ASHEVILLE	19	690	27.5	5	11	256	46.0				
FORSYTH	7	66	2744	31.3	5	58	1130	51.3	BURLINGTON	2	12	576	20.8	1	10	142	70.4			
FRANKLIN	6	162	33.0		2	12	265	45.3	CHAPEL HILL	1	6	325	18.5		3	49	-			
GASTON	2	62	2460	25.2	3	28	479	58.5	CHARLOTTE	4	73	3155	23.3	6	85	1963	43.3			
GATES	1	1	45	-		6	91	-	CONCORD		8	212	37.7		9	106	84.8			
GRAHAM	1	2	106	-			16	-	DURHAM	19	920	20.7	3	37	851	43.5				
GRANVILLE	2	7	239	29.3		13	364	35.7	EDEN	4	233	-		2	64	-				
GREENE	1	4	97	-		5	149	33.6	ELIZABETH CITY	1	2	165	-		3	98	-			
GUILFORD	7	99	3896	25.4	8	74	1586	46.7	FAYETTEVILLE	7	34	968	35.1	2	31	590	55.8			
HALIFAX	2	10	412	24.3	2	24	581	41.3	GASTONIA	21	613	25.8		10	203	49.3				
HARRETT	3	20	528	37.9	1	14	323	43.3	GOLDSBORO	1	6	331	18.1	1	18	247	72.9			
HAYWOOD	2	22	661	33.3		1	17	-	GREENSBORO	3	90	1652	27.0	7	44	916	48.0			
HENDERSON	2	25	678	36.9	1	2	49	-	GREENVILLE	9	355	26.9		1	8	199	40.2			
HERTFORD	1	9	136	66.2	17	260	65.4	HENDERSON	3	129	-		1	10	149	67.1				
Hoke	2	104	-		4	226	-	HICKORY	1	13	353	36.8		4	98	-				
HYDE	2	38	-		1	4	40	-	HIGH POINT	1	24	830	28.9	1	16	439	36.4			
IREDELL	4	29	950	30.5	4	17	325	58.3	JACKSONVILLE	10	420	53.8		3	64	-				
JACKSON	6	299	20.1		1	62	-	KINSTON	4	299	-		4	233	-					
JOHNSTON	5	25	748	33.4	1	18	326	55.2	LENDIR	2	7	223	31.4		4	57	-			
JONES	1	70	-		1	2	74	-	LEXINGTON	1	11	260	42.3		5	88	-			
LEE	2	4	390	-		6	171	35.1	LUMBERTON	3	193	-		10	197	50.8				
LENDIR	2	13	610	21.3		12	427	28.1	MONROE	1	5	137	36.5	1	5	70	-			
LINCOLN	2	14	552	25.4	1	5	94	-	NEW BERN	1	5	168	29.8		5	126	39.7			
MCDOWELL	3	22	526	41.8		3	42	-	RALEIGH	2	39	1613	24.2	1	35	584	59.9			
MACON	5	216	33.1			1	8	-	REDSVILLE	5	176	28.4		4	98	-				
NADISON	8	235	34.0			2	-		ROANKE RAPIDS	1	6	187	32.1	1	3	42	-			
MARTIN	7	200	35.0		2	16	265	80.4	ROCKY MOUNT E	2	108	20.4		8	148	80.5				
MECKLENBURG	7	119	4797	24.8	8	98	2274	43.1	ROCKY MOUNT N	3	235	-		1	7	100	-			
MITCHELL	2	5	200	25.0		3	-		SALISBURY	3	191	-		1	7	137	51.1			
MONTGOMERY	7	255	27.5		1	10	114	87.7	SANFORD	2	3	174	-		2	71	-			
MOORE	1	24	464	51.7		10	240	41.7	SHELBY	6	187	32.1		6	125	48.0				
NASH	1	9	555	16.2	4	28	528	53.0	STATESVILLE	1	10	279	35.8	2	8	143	55.9			
NEW HANOVER	2	25	1158	21.6	5	19	387	49.1	THOMASVILLE	1	9	186	48.4	1	4	95	-			
NORTHAMPTON			104	-	2	11	284	38.9	WILMINGTON	2	15	555	27.0	4	13	320	40.8			
ONSLOW	3	63	2171	29.0		20	497	45.8	WILSON		10	287	34.8		13	280	46.4			
ORANGE	3	22	877	25.1		9	231	39.0	WINSTON SALEM	5	53	1448	36.6	5	55	1068	51.5			
PAMLICO		3	90	-		3	59	-												
PASQUOTANK	6	295	20.3		7	180	38.9													

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

RESUME OF PROGRAM

ONE HUNDRED SIXTEENTH ANNUAL SESSION

Saturday, May 16, 1970

- 9:00 a.m. EXECUTIVE COUNCIL meets Business Session
(Crystal Room)
- 10:00 a.m. Registration
(Front Lobby)
- 1:30 p.m. SECTION ON RADIOLOGY
(Pine Room)

Sunday, May 17, 1970

- 10:00 a.m. Registration
(Front Lobby)
- 10:00 a.m. N. C. Academy of General Practice Board of Directors Meeting
(Camellia Room)
- 2:00 p.m. First Meeting of the Annual Meeting
THE HOURS OF DELEGATES of the Medical Society
(Cardinal Ballroom)
MEMORIAL SERVICES - in memory of those physicians who have died during the year.

Monday, May 18, 1970

- 9:00 a.m. NORTH CAROLINA BOARD OF MEDICAL EXAMINERS meets for Business and Hearings
(Camellia Room)
- 9:00 a.m.- 5:00 p.m. AUDIO-VISUAL POSTGRADUATE PROGRAM
(Azalea Room)
- 9:00 a.m. Specialty Sections Meetings:
General Practice of Medicine
(Cardinal Ballroom)
Ophthalmology & Otolaryngology
(Ballroom - Holly Inn)
Public Health & Education
(TV Lounge - Holly Inn)
Anesthesiology
(Dutch Room)
Orthopaedics & Traumatology
(North Room)
Dermatology
(Pine Room)
- 11:00 a.m. FIRST GENERAL SESSION
(Cardinal Ballroom)

- 11:30 a.m. Tutor Audio-Visual Training System
(Dutch Room)
- 1:30 p.m. Section on Student AMA Chapters (SAMA)
(North Room)
- 2:00 p.m. REFERENCE COMMITTEES of the House of Delegates meet in open session
I - (Cardinal Ballroom)
II - (TV Lounge - The Carolina)
III - (Pine Room)
- 5:30 p.m. EXHIBITORS' Social Hour
(Pinehurst Country Club)
- 7:00 p.m. STUDENT AMA CHAPTERS DINNER
(Holiday Inn-Southern Pines)
- 7:00 p.m. MEDPAC Banquet
(Main Dining Room-The Carolina)
- 9:00 p.m.- 1:00 a.m. DANCING
Lee Boswell Orchestra
(Cardinal Ballroom)

Tuesday, May 19, 1970

- 8:30 a.m. Exhibits Open
- 9:00 a.m.- 5:00 p.m. AUDIO-VISUAL POSTGRADUATE PROGRAM
(Azalea Room)
- 9:00 a.m. Specialty Sections Meetings:
Internal Medicine
(Ballroom - Holly Inn)
Surgery
(North Room)
Pediatrics and Obstetrics & Gynecology
(Cardinal Ballroom)
Neurology and Psychiatry
(Pine Room)
Pathology
(TV Lounge - Holly Inn)
- 11:00 a.m. SECOND GENERAL SESSION
(Cardinal Ballroom)
"THE FUTURE OF MEDICINE AND MEDICAL EDUCATION"
- 11:30 a.m.- 5:00 p.m. Tutor Audio-Visual Training System
(Dutch Room)
- 12:30 p.m. ANNUAL ADDRESS OF THE PRESIDENT
Edgar T. Beddingfield, Jr., M.D., President
(Cardinal Ballroom)
- 2:30 p.m. Second Meeting
HOUSE OF DELEGATES
(Cardinal Ballroom)

- 5:30 p.m. **PRESIDENT'S RECEPTION**
(Azalea Room)
- 7:00 p.m. **PRESIDENT'S DINNER**
(Main Dining Room)
- 9:00 p.m. **Entertainment and PRESIDENT'S BALL**
(Cardinal Ballroom)

Wednesday, May 20, 1970

- 9:00 a.m. **THIRD GENERAL SESSION**
(Cardinal Ballroom)
- 9:00 a.m. **CONJOINT SESSION:**
North Carolina State Board of Health
and Medical Society of State of North Carolina
- 9:30 a.m. **Presentation of:**
Moore, Wake and Gaston County
AWARDS
Exhibitor Award and Medical Student
Exhibitor Award
AMA-ERF checks to medical schools
Recognition of Nurse of the Year
Recognition of FIFTY-YEAR CLUB
- 10:00 a.m. **THE PHYSICIAN AND THE LAW**
J. Leonard Goldner, M.D.,
Durham, President SMA
- 10:30 a.m. **CURRENT TRENDS IN THE SOCIO-ECONOMIC ASPECTS OF HEALTH CARE**
Richard S. Wilbur, M.D.,
Assistant Executive Vice-President
American Medical Association
- 11:00 a.m. **MAN IN SPACE:**
Alan C. Harter, M.D., Chief,
Launch Site Medical Operations,
Kennedy Space Center, NASA, Fla.
- 11:30 a.m. **ADDRESS:**
Louis deS. Shaffner, M.D.
- 12:00 Noon **Installation of Officers for 1970**
(Cardinal Ballroom)
- 12:30 p.m. **PRESENTATION OF PRIZES**
(Cardinal Ballroom)

Adjourn Sine Die

ALUMNI LUNCHEONS AND DINNERS

Sunday, May 17, 1970

- 6:30 p.m. **Social Hour -**
Section on Dermatology
(Crystal Room)

Monday, May 18, 1970

- 12:30 p.m. **Ophthalmologists' Luncheon**
(Crystal Room)
- 1:00 p.m. **UNC Medical Alumni Association Luncheon**
(East End - Main Dining Room)
- 6:00 p.m. **Social Hour & Dinner**
Duke Medical Alumni Association
(Country Club of North Carolina)
- 6:00 p.m. **Social Hour**
Medical College of South Carolina
Medical Alumni Association
(Pine Room)
- 6:30 p.m. **Social Hour and Dinner**
Medical College of Virginia Alumni
(Crystal Room)

Tuesday, May 19, 1970

- 1:00 p.m. **Bowman Gray Medical Alumni of Wake Forest College**
(Crystal Room)
- 1:00 p.m. **North Carolina Society of Internal Medicine**
(Ballroom - Holly Inn)

Wednesday, May 20, 1970

- 7:45 p.m. **Editorial Board Breakfast**
North Carolina Medical Journal
(Main Dining Room - East End)

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Committees & Organizations

HIMLER REPORT RECOMMENDATIONS

Appearing below are the recommendations of the Himler Report, the report of the AMA's Committee on Planning and Development. The complete report is available through district councilors, county society secretaries, and state society delegates.

1. That the AMA adopt the following as a statement of the primary purpose and responsibility of the Association and the medical profession:

"To endeavor, by all appropriate means, to make health services of high quality available to all individuals, in a dignified and acceptable manner, regardless of their social class, ethnic origin, ability to pay for services, or the source of the payment."

The adoption of the following as a corollary or, rewritten, as a separate policy statement:

"The American Medical Association has the duty to guide and assist the medical profession in the attainment of this objective."

2. That, while the AMA must be prepared to accept some circumscription of the traditional privileges and freedoms of physicians, the following policy be adopted:

"That the American Medical Association recognize the need for new and improved methods of delivering health services, that it encourage and participate in efforts to develop them, and

"That, in the interest of attracting the most highly qualified candidates to the field of medicine, it simultaneously make every effort to maintain and create incentives in medical practice. Among these incentives are minimal regimentation, a multiplicity of practice options, and freedom of choice for both physicians and patients."

3. That the AMA officially adopt the following World Health Organization definition of health:

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

4. That AMA adopt an active role and take the initiative in developing all plans and

programs for health care in all their ramifications and that it encourage and assist state and county medical societies to do the same at their respective levels.

5. That an appropriate committee or division of the Association secure data from all the state medical societies on the adequacy of health services and the manner in which they are being provided in their rural and underprivileged areas, and the practice mechanisms, if any, that are being considered or developed to correct existing deficiencies. Based on this information, the same committee should devise delivery systems consonant with the Association's principles and incentives for physicians to settle in medically deprived localities.

That the Association, in conjunction with state and county medical societies, establish a service of consultation and assistance for such physicians to facilitate the planning and financing of their projects.

That, in those instances in which physicians cannot be found to develop health care facilities with the capability of providing needed services, the AMA urge, encourage, and assist the state and local medical societies to do so on an operational basis.

That the Association study the possibility of establishing a corporation for this purpose, with subsidiary corporations at state and local levels. All such corporations should be legally empowered to receive payments for services rendered and would apply surplus income over expenditures to activities designed to improve health care in their areas, both quantitatively and qualitatively.

That the AMA and the constituent and component medical societies seek the active involvement of medical centers and voluntary hospitals in health service projects for the medically underprivileged.

6. That the AMA, through its Council on Health Manpower, in conjunction with other professional, educational, and lay associations, continue to explore and develop expedients to overcome health manpower shortages.

That the Association in its future declaration and activities directed toward the alleviation of shortages in health services and personnel, underscore the fact that these shortages are not due merely to an insufficient number of health professionals

across-the-board, and emphasize that maldistribution of practitioners geographically, by profession, and by specialty is an equally important factor in depriving communities of an adequate supply and spectrum of health services.

That the Association publicize the reasons for the maldistribution, as outlined in this section, and stress that the voluntary correction of these deficiencies requires public cooperation and community action in addition to the measures taken by the health professions.

7. That an appropriate Committee of the AMA immediately begin to formulate a policy on doctor's assistants, particularly with regard to their responsibilities, limitations on their practice, and supervision of their services by qualified physicians.

That the AMA reaffirm the principle that the basic responsibility for the care and welfare of patients lies with their physicians of record and that responsibility cannot and should not be delegated.

That the Association's Law Division assist the state medical societies in identifying and avoiding any legal hazards that may accompany the employment of doctors' assistants.

8. That the Association take no public position for or against private solo practice, private group practice, fee-for-service payment, or prepayment by capitation.

That an appropriate committee of the AMA be charged with the task of establishing the basic criteria which any proposed system of delivery of health services or mechanism for payment must satisfy to be acceptable.

That the Association, in all public statements, emphasize the concept that differences in education, culture and income levels create problems that may necessitate different systems of delivering medical care for different population groups.

That the state and local medical societies be encouraged and assisted in devising and proposing practice expedients suited to their localities and their problems.

That the Association, in conjunction with the state and county medical societies, establish a consultation and assistance service for physicians or groups of physicians who

wish to develop organizations or programs for the rendering of health services.

That the AMA endeavor to be informed of the pilot projects that are proposed by other sources and that it request the Department of HEW to discuss those projects with the Association before they are put into effect.

That the Association seek to insure that the value judgments made by the Department of HEW on plans, programs, pilot projects and payment mechanisms are firmly based on the criteria and standards the AMA has developed for that purpose.

9. Urge state medical associations to undertake various studies, including surveys of prevailing medical fees.

Develop a uniform methodology for conducting such studies to the end that the data from the various states and localities be comparable.

Serve as a clearing house for the material thus obtained and, after analysis, redistribute the data to the state medical association with suggestions and conclusions.

Urge the state medical associations to designate negotiators who are qualified to deal energetically with government agencies on all matters pertaining to tax-supported programs. Such individuals or groups should be formally appointed and the government jurisdiction involved should be notified that all negotiations will be conducted by them.

10. That the AMA urge state and county medical societies to assume the functions of monitoring fees and containing the costs of health care.

That the Association, in cooperation with constituent societies, determine what powers the state and local societies require to serve those functions and how those powers can be best obtained.

11. Endorse the principle of voluntary, life-long post-graduate study for all physicians and continue and accelerate the development of programs and incentives for such study.

Through the state medical societies, investigate the current status of in-hospital audit methods and make a similar investigation of the state of development of the evaluation of office services.

Encourage and assist the state medical societies and state departments of health and

Getting a new heart used to be a fairy tale.

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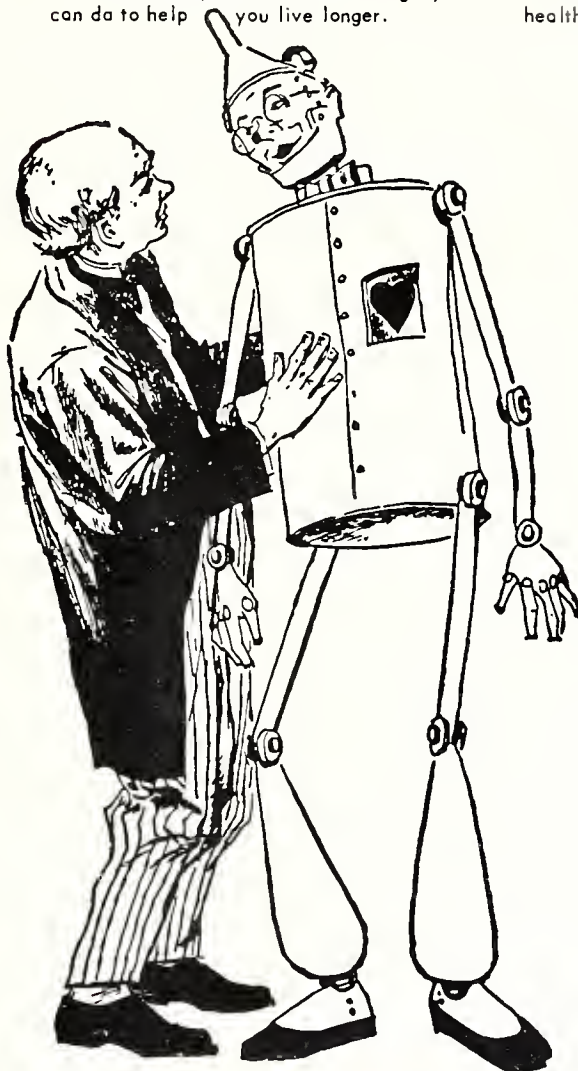
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welfare to develop uniform and effective methods of audit for both office and in-hospital services, based on electronic data processing, to the maximum possible extent.

Request the Law Division to clarify the extent to which a physician's responsibility for the privacy of his patients' records will permit him to cooperate in an audit of his office practice.

12. That the AMA encourage and assist all state medical associations to devise programs for voluntary post-graduate study designed to maintain medical education at an optimum level and to be least disruptive to the provision of medical services.

That the Association obtain information from each state medical society as to whether special requirements have been imposed on physicians who render services to patients under the provisions of tax-supported programs and obtain the specifics of what those requirements are.

Bulletin Board

COMING MEETINGS

North Carolina Dental Society Meeting—Carolina Inn, Pinehurst, May 10-11.

Medical Society of the State of North Carolina, 116th Annual Session—Carolina Inn, Pinehurst, May 16-20.

Annual Joint Meeting of the Regional Medical Program Board of Directors and Advisory Council—Carolina Inn, Pinehurst, May 20.

North Carolina Heart Association—Durham Hotel, Durham, May 26-27.

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

The Rockefeller Foundation has awarded Duke University \$150,000 toward support of its training program for physician's assistants and development of other experimental health service programs.

The money will be paid over a three-year period.

Duke's Physician's Assistant Program, the first in the country, was designed to train ex-military corpsmen as highly skilled assistants to doctors. Similar programs have developed at other schools and persons other than ex-corpsmen are among trainees at Duke and elsewhere.

The program at Duke has graduated 29 PA's.

The support from the Rockefeller Foundation will aid in permitting the enlargement of class size from 12 to 40 students per year.

The physician's assistants are trained not only in general medicine but also in a number of medical and surgical sub-specialties.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Eight outstanding college students have been selected to receive Reynolds Scholarships for study at the Bowman Gray School of Medicine.

The scholarship program, sponsored by the Z. Smith Reynolds Foundation, will provide each recipient \$18,000 during his four years of medical school.

Selection of the scholars is made by the medical school's committee on admissions on the basis of character, scholarship, potential as physicians and financial need.

The scholars, who will enter the Bowman Gray School of Medicine in September, are Philip E. Ashburn of Kernersville, University of North Carolina at Chapel Hill; Miss Linda Claire Bartlett of Raleigh, North Carolina State University; Jerry W. Biddix of Belmont, University of North Carolina At Chapel Hill.

Also, William R. Lambeth of Greensboro, University of North Carolina at Chapel Hill; Richard S. Marx, formerly of Asheville, Wheaton College; Joel B. Miller of Statesville, Wake Forest University; and Lynn H. Orr, Jr., of Winston-Salem, University of North Carolina at Chapel Hill.

Recipients of the scholarships are expected to follow their profession in North Carolina after the completion of their formal medical education.

Dr. M. Robert Cooper, assistant professor of medicine, recently participated in the 1970 Stoneburner Lecture Series at the Medical College of Virginia. He presented a lecture on "New Hemoglobinopathies."

Dr. C. Douglas Maynard, assistant professor of radiology, was the first visiting professor of nuclear medicine at the University of Kentucky Medical Center, Feb. 19-20. He lectured on "Uses of Radioisotopes in the Diagnosis of Renal Disease" and "Brain Scanning---What's New?"

He also presented a paper on "Radioisotope Cerebral Angiography" at a meeting of the Kentucky Bluegrass Radiological Society.

Dr. Timothy C. Pennell, assistant professor of surgery, recently was presented two awards by the Winston-Salem Sertoma Club. He was given the Service to Mankind Award for his work in the community with young people, especially in the area

of drugs and drug abuse. He also received the Youth Service Award, given by La Sertoma, the women's organization of the service club.

Nine students at the Bowman Gray School of Medicine recently were installed as new members of Alpha Omega Alpha, national medical honor society.

Election to membership in AOA is based on scholastic achievement and character.

Senior students who were tapped for membership are Charles F. Alexander III of Oshkosh, Wis.; William J. Casey of Arlington Heights, Ill.; Michael J. Hensley of Raleigh; David L. Heymann of Galetton, Pa.; P. Samuel Pegram of Greensboro; and Lovett P. Reddick of Greenwood, S. C.

Elected from the junior class were Warner M. Burch Jr. of Grifton; W. David Purnell of Charlotte; and Donald W. Shelley of Columbia, S. C.

The aims of Alpha Omega Alpha are the promotion of scholarship and research in medical schools, the encouragement of a high standard of character and conduct among medical students and graduates, and the recognition of high attainment in medical science.

Dr. Frank C. Greiss, Jr., associate professor of obstetrics and gynecology, has been reappointed chairman of the Committee on Obstetric Anesthesia and Analgesia, American College of Obstetricians and Gynecologists.

Dr. Robert J. Cowan, resident in radiology, recently was named a Picker Scholar for 1969-70 by the James Picker Foundation.

Dr. I. Meschan, professor and chairman of the Department of Radiology, was a visiting lecturer at Boston City Hospital recently. He spoke on "Core Curriculum Approach to Teaching Residents in Radiology."

Dr. Hugh B. Lofland Jr., professor of pathology, participated in the 12th Agricultural Industries Forum held at the University of Illinois. He spoke on "Diet and Coronary Heart Disease: How Much Do We Know?"

Dr. Donald J. Pizzarello, associate professor of radiology, was recently a visiting lecturer at Jefferson University School of Medicine, where he spoke on "Diurnal Variations in Radiation Sensitivity: A Possible Explanation."

Dr. Edward Lieberman, assistant professor of physiology, presented a paper on "Transient Transmembrane Water Transport in Axons" at a recent meeting of the Biophysical Society in Baltimore, Md.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Dr. Roy Lindahl of the University of North Carolina School of Dentistry faculty has been named to a special American Dental Association Task Force on National Health Problems.

Announcement of the appointment came from ADA President Dr. Harry M. Klenda.

Dr. Lindahl is a chairman of the American Dental Association's Council on Dental Care Programs and is a professor of pedodontics in the UNC School of Dentistry.

Dr. Colin G. Thomas, Jr., professor of surgery and chairman of the department of surgery in the University of North Carolina School of Medicine, participated in the Sixth Annual Cancer Training Day held at the University Hospital of the West Virginia University School of Medicine in Morgantown, W. Va., on March 20-21.

Three University of North Carolina faculty promotions have been announced by Chancellor J. Carlyle Sitterson following approval of Consolidated University President William C. Friday and the Board of Trustees.

Two were in the School of Public Health. Dana E. A. Quade and Pranab Kumar Sen were promoted to full professor.

Eva Carolyn Boyd of the Medical School was promoted from instructor to assistant professor.

Chaplain Fred W. Reid, Jr., professor of Hospital Administration and hospital chaplain at North Carolina Memorial Hospital, has been elected president-elect of the College of Chaplains of the American Protestant Hospital Association.

A graduate of the University of Richmond, Reid holds a B.D. degree from the Southeastern Baptist Theological Seminary in Wake Forest and a Th.M. from the Divinity School of Duke University. He is currently a doctoral candidate at UNC.

The University of North Carolina is attempting to increase the manpower resources of North Carolina by retraining 21 former maids, clerks, and cafeteria workers.

By September these employees will be laboratory assistants, if they pass the course they are now taking at the UNC School of Medicine.

The program is funded by the Medical School, the University of North Carolina, and the U. S. Labor Department's New Careers program through Operation Breakthrough.

"Dope and Productivity," a five-day symposium on drug use and abuse, was held in March on the University of North Carolina campus.

Highlighting the list of speakers was Sam Anglina, a former narcotics addict who had a 14-year history of drug use, and Dr. Morris Lipton, chairman of the UNC Department of Psychiatry since 1959.

Jointly sponsored by several student organizations, interested faculty, and administrative staff members, the symposium was designed to provide an open forum on the medical, psychological, and legal aspects of drugs for members of the University community.

Pulitzer Prize winning microbiologist-ecologist, Dr. Rene Dubos was among noted experts addressing the 1970 Carolina Symposium.

Dubos spoke March 18 on "We Are the Environment."

The distinguished Rockefeller University Professor joined U. S. Senator Edmund S. Muskie and former Secretary of the Interior Stewart L. Udall in the five-day examination of "Man and Environment" March 15-19.

Results of almost 20 years of research utilizing beagles and other animals, to investigate possible environmental and industrial hazards of plutonium and other radioactive substances, were presented in March at the Radiation Research Society's 18th annual meeting by a team of scientists headed by Dr. Betsy J. Stover of Chapel Hill, formerly of the University of Utah's Division of Radiobiology. Research is sponsored by the Atomic Energy Commission.

A new theory was presented by Dr. Stover as a culmination of her joint work with Distinguished Professor of Chemistry Henry Eyring of the University of Utah. It is known as the "Steady State Theory of Mutation Rates", and has been applied to survival of beagles subjected to irradiation from plutonium. It is a basic unifying theory which can be applied to studies of aging, carcinogenesis, irradiation, poisons and other stresses.

NORTH CAROLINA BLUE CROSS AND BLUE SHIELD

The film "The Price of Illness," seen recently on North Carolina's Educational TV network as a part of the series "Medical Report," is now available to interested groups from North Carolina Blue Cross and Blue Shield.

The 30-minute sound film features an account of a heart attack. To dramatize the cost of medical care today, the film follows a heart attack victim through emergency room, intensive care unit, and hospital ward. As costs mount, a narrator relates the price of each treatment procedure.

A discussion of the factors affecting health care costs and what's being done to curb them follows. On the panel talking about these issues are William Lowrance, president of the North Carolina Hospital Association; Edgar T. Beddingfield, Jr., M.D., President of the Medical Society of the State of North Carolina; and J. A. McMahon, president of North Carolina Blue Cross and Blue Shield, Inc.

Arrangements for booking "The Price of Illness" may be made by writing to North Carolina Blue Cross and Blue Shield, Inc., Public Relations Division, P.O. Box 2291, Durham.

The Medical Society of the State of North Carolina has appointed Roy S. Bigham, M.D., of Charlotte to the Board of Trustees of North Carolina Blue Cross and Blue Shield, Inc.

Dr. Bigham, an internist, was named to the Blue Cross and Blue Shield Board to fill the unexpired term of the late Paul Deaton, M.D. of Statesville. Dr. Deaton, who died in January, had served on the board since 1966. His unexpired term runs through May 1970.

Active in health and civic affairs, Dr. Bigham is past-president of the North Carolina Society of Internal Medicine. He has served on several committees of the American Society of Internal Medicine, was secretary of the North Carolina Diabetes Association, and is currently a commissioner of the Medical Society of the State of North Carolina.

Until May 1969 Dr. Bigham was chairman of the Blue Shield Committee. He was a member of the committee for six years.

AMERICAN ACADEMY OF GENERAL PRACTICE

Two thousand family doctors took a written examination on the weekend of Feb. 28-March 1 which, if passed, will qualify them as specialists in family practice, a new medical specialty emphasizing comprehensive continuing care of the family.

The two-day examination was offered simultaneously at 36 academic centers throughout the United States under the aegis of the American Board of Family Practice.

The examination marks a milestone in American medical history, bringing medical education almost full circle. Before World War II most doctors were general practitioners and patient-care oriented. Since the war, emphasis has been on specialization to the extent that less than 15% of medical school graduates enter family or general practice today.

The advent of the new broad-scale specialty, approved just a year ago by the American Medical Association and the Advisory Board for Medical Specialties, now offers the family doctor-to-be specialty status and the confidence of full-scale residency training. It offers the public the promise that more young doctors will begin to enter primary care as a career. With more primary doctors available, entry into the complex health care system can become easier and less expensive for all citizens.

AMERICAN MEDICAL RECORD ASSOCIATION

A significant name change has been made by a national paramedical organization.

As of January 1, 1970, it became the "American Medical Record Association (AMRA)," instead of the American Association of Medical Record Librarians (AAMRL).

The new name was adopted unanimously by the Association's house of delegates at its 41st Annual Meeting and Exhibit in New York City. It was chosen principally because the former name was confusing and ambiguous to those not engaged in hospital work, and because "AAMRL" was too restrictive for the ever-expanding scope of the medical record profession.

Membership of the "American Medical Record Association" includes registered record librarians (RRLs), accredited record technicians (ARTs), medical record students, medico-legal authorities, hospital administrators, federal and state health officials, data processing experts, systems analysts, insurance representatives, medical educators, and a number of physicians and surgeons.

AMERICAN ACADEMY OF GENERAL PRACTICE

A bill authorizing 425 million dollars in federal funds to support training programs for family doctors and others in the field of family medicine was introduced in the U. S. Senate and House of Representatives simultaneously on Feb. 9 by Sen. Ralph Yarborough (D-Tex.) and Rep. Fred Rooney (D-Pa.)

The bill, whose funds would be appropriated through 1975, provides for grants to be made by the Secretary of Health, Education and Welfare to (1) medical schools; (2) teaching hospitals, and (3) interns and residents who plan to make family medicine their specialty.

The proposed legislation was introduced on the first anniversary of the announcement of the approval of family medicine as a primary medical specialty. The specialty became a fact when the Council on Medical Education of the American Medical Association and the Advisory Board for Medical Specialties approved a certifying board in family medicine in 1969 just prior to the annual Congress on Medical Education in Chicago.

Since that time the AMA and the American Academy of General Practice, the national association of family physicians and a sponsor of the new certifying board, have placed major emphasis on educational programs at the residency level to begin preparing young doctors specialty certification in this field

AMERICAN HOSPITAL ASSOCIATION

The nation's 5,820 community hospitals experienced a 17.2% increase in total expenses in 1969, the American Hospital Association reported recently.

THE MONTH IN WASHINGTON

The Nixon Administration called for limitations on medicare and medicaid reimbursements to physicians and hospitals.

Health, Education and Welfare under Secretary John G. Veneman told the Senate Finance Committee that, because of rising costs, "it is now time to make some fundamental changes in the law which governs medicare and medicaid reimbursements." He said the reasonable cost and reasonable charge criteria in the medicare law had not provided opportunity for major cost-control efforts.

"We need an incentive system of institutional reimbursement and we need changes in the law that will help control the increases in the amount that the medicare program will recognize in the charges of individual practitioners..

"I believe...that the law should be changed so as to limit further the rate at which increases in physicians fees would be recognized by medicare."

"Customary and prevailing charges under the program and the fees recognized by the carriers under comparable circumstances in their own business reflect, in the long run and after a suitable lag in recognition of fee increases, whatever physicians choose to charge the public generally in a market where growing demand is pressing increasingly on the limited supply of health personnel.

"Reliance on Blue Shield fee schedules as the limiting factor in medicare reimbursement, as suggested in the Senate Finance Committee staff report, however, would not seem to us to have long-run viability. Tying payments under a program as large as medicare to Blue Shield schedules would surely exert a major upward pressure on those schedules...

"We believe that it is necessary to move in the direction of an approach to reasonable charge reimbursement that ties recognition of fee increases to an index.

"Under such an approach, allowable charges recognized for medicare would next year be generally limited to either presently recognized charges or to a new prevailing level set at the 75th percentile of 1969 average customary charges for a given service in an

area. In the future the prevailing charge screen would move upward only in proportion to increases in an index made up of pertinent portions of wage and price indices. Under such an approach, recognition of fee increases would continue, but only in relation to things that are happening in other parts of the economy and that have a bearing on the physician's cost of doing business."

The American Medical Association said that any proposal for further limitations on physicians' fees under the government programs would be unwise.

"For all practical purposes, a freeze on physicians' fees under the two federal programs has been in effect for more than a year and has proven to be ineffective," Gerald D. Dorman, M.D., AMA President, said. "The costs of the program have continued to rise in spite of the freeze.

"Physicians are disturbed by the threats of additional federal controls.

"Burdening these busy doctors with more red tape and restricting payments to unrealistically low levels may drive them away from participating in Medicare and Medicaid. Then the government will have discriminated against many people who need medical care...

"The national interests would be better served if everyone joined with the American Medical Association in its efforts to provide more physicians."

* * *

The National Society for Medical Research said that no valid finding on the effects of marijuana can be expected for another two to seven years.

Science Research Society said part of the difficulty is there is no standard yardstick for evaluating marijuana in scientific studies. The basic weed from which marijuana is made can vary from plant to plant and from country to country, the group said.

But the Society cautioned in a statement: "Until scientifically proven results are obtained, it appears as foolhardy to smoke marijuana as it would be to take any other unknown drug or chemical agent just for kicks."

The Society said two projects are now going on in an effort to achieve scientific standardization in marijuana studies.

The federal government has negotiated new agreements with France and Turkey aimed at stemming the flow of heroin into this country.

But, in announcing the agreements, John E. Ingersoll, director of the Bureau of Narcotics and Dangerous Drugs, said the government's long-range objective in dealing with the problem is "to induce the medical community to find adequate substitutes" for opium, from which heroin is derived.

Ingersoll admitted the U.S. was asking a great deal of Turkey where opium has been grown for centuries.

"But when you've got over 900 deaths last year from heroin, 224 of them teenagers, in one city, I think you've got a right to start hollering," he said. "There have been three deaths a day from heroin in New York City this year. It is the major cause of death for 18 to 35-year-olds in New York City."

Ingersoll estimated that 80% of the 2.5 to 3 tons of heroin smuggled into the U.S. annually comes from the poppy fields of Turkey via the clandestine laboratories of France where the opium is refined into heroin.

The agreement with Turkey includes a \$3 million loan approved by the agency for international development in 1968. The money is to be used partly to help the Turks substitute crops like sugar beets and sorghum for opium, and partly to equip and train a 460-man narcotics police force.

The U. S. agreement with France calls for frequent exchange of meetings in Washington, D.C. and in Paris to exchange information on such matters as the known drug traffickers and trafficking routes.

France also has assigned a force of 300 police to fight narcotics internally and 30 police to combat it at the international level. Ingersoll's narcotics bureau will increase its manpower in France next year and also will engage in a crosstraining program with French police.

* * *

Congress finally approved an appropriation bill acceptable to President Nixon to provide funds for the Health, Education and Welfare and the Labor departments for the 1970 fiscal year which began last July 1.

The two departments operated under stopgap Congressional resolutions while Nixon and Congress battled over how much money the bill should provide. The President vetoed the first bill passed by Congress on the ground that it would be inflationary because it exceeded his budget by \$1.2 billion. Congress sustained the veto but still refused to go all the way with Nixon in cutting funds for the two departments. The second bill totalled \$19.4 billion, \$680 million more than the President requested. But Nixon accepted the compromise amount when Congress added a provision authorizing him to withhold 2% of the funds.

The second bill had \$176 million in Hill-Burton hospital funds, compared with \$258 million in the vetoed measure. The appropriation for health facilities, education research and libraries was cut from \$149 million to \$126 million.

In Memoriam

Emmett Ashworth Sumner, M.D.

Emmett Ashworth Sumner, at age 69, gave up mortal life on Nov. 7, 1969, at High Point Memorial Hospital after a heart attack on the previous day. Few current members of the Guilford County Medical Society knew him, for after his initial heart attack in 1953 he was unable to continue his surgical practice and activities in this society. Previously he had served it as president. During the years since his forced retirement he had also suffered from a crippling arthritis.

Those of us who are familiar with his life and work wish to memorialize Emmett Sumner during these few moments, and through the permanent records of this society. It is of worth to all of us to know something of this man, struck down at 53 at the height of outstanding competency of a general surgeon. He was always

active with his contemporaries on the staff of High Point Memorial Hospital and in the affairs of this society.

Emmett was born in Randleman, Randolph County, on Aug. 22, 1900. His father was Dr. William I. Sumner, beloved general practitioner at Randleman. His mother, Amanda Allred, was a native of Randolph County. Both parents are deceased.

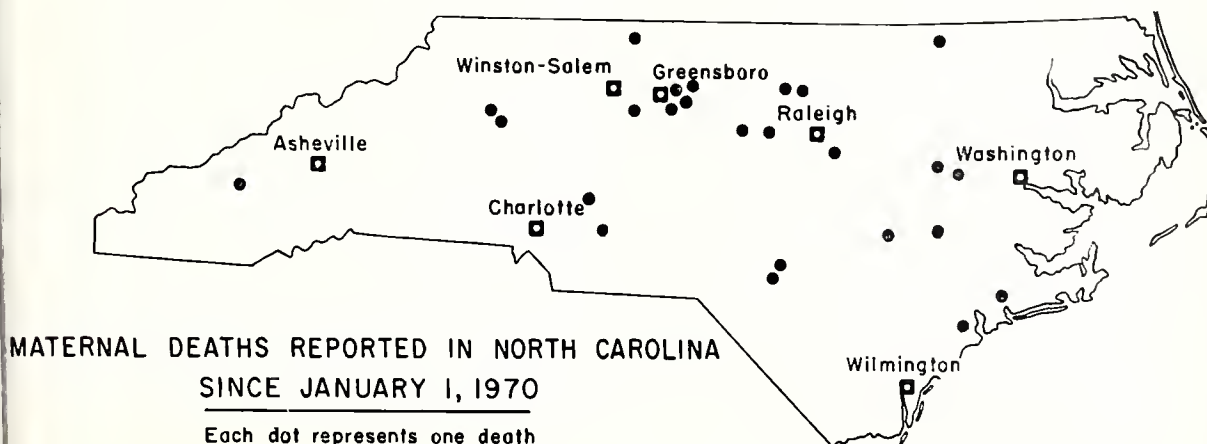
Completing his academic studies and two years of medicine at the University of North Carolina, Emmett graduated at Baylor University Medical School in 1925. Among his classmates at Baylor was Milford Rouse, a recent president of the American Medical Association. Popular with his fellow students, Emmett exchanged visits with some of them through the years.

On September 24, 1926, Emmett Sumner was married to Gertrude Rea, who died July 26, 1949. From this union came two sons; Emmett A. Sumner, Jr., of Greensboro and William R. Sumner of Winston-Salem, and two grandchildren. Two sisters also survive. His later marriage was to Mary Whitely, who for 16 years was his constant companion and helpmate.

Coming to High Point in 1928 as a member of the surgical staff of Burrus Clinic and High Point Memorial Hospital, he continued this service until his retirement.

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IN THIS ISSUE:

Your Stake in the AMA

John R. Kernodle, M.D.



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As the Seventies Begin

Your Stake in the AMA

JOHN R. KERNODLE, M.D.*

Let us suppose that 250 physicians had not met in Philadelphia in 1847, with the intent of organizing the American Medical Association. What, then, would be the state of American medicine today? Perhaps it would not be much different from what it was in 1847. If so . . .

Formal medical training might be almost nonexistent today.

There might be many poorly trained physicians, and perhaps even untrained physicians.

There might be no code of ethics or professionalism to guide physicians.

There might be far fewer physicians, since medical students would not have had the benefit of more than 41,000 loans, amounting to more than \$45 million to finance their education.

Hundreds of physicians, and their specialty, local, and state medical organizations, might not have a central place to which they could turn for advice, information, and assistance in the practice of medicine. Hundreds of up-to-date technical journals and other publications might not be available to physicians and others in the health-care field.

Quackery might be rampant; there might not be an organization at the national level to investigate quackery, and to expose its evils and its practitioners.

There might be no organization to serve as a watchdog in the nation's capitol, seeking to protect the public from unwise legislation in the medical and health fields.

There might not be a national organization

to evaluate foods, drugs, and pesticides; to work for the health and safety of workers and pupils; to develop standards for nursing homes; to conduct public education programs on traffic safety, on safety at home and on the farm, and other subjects.

All of these functions—and many, many more—are performed by the American Medical Association.

It is true, of course, that over the years another organization—or several other organizations—*MIGHT* have been formed to perform these services. Certainly, the founders of the AMA could not predict the many roles their fledgling organization was destined to play as it served the medical profession and the public.

Those doctors met more than a century ago to form an organization which would “promote the art and science of medicine, and improve the public health.” They wanted to take steps which would assure the best possible medical care for Americans. That was the goal of the AMA when it was founded in 1847, and that is its goal as we begin in the 1970s. The organization serves member physicians by helping them to provide the best possible care for their patients.

Structure and Operation of the AMA

There are almost 220,000 physician members of the AMA, which is composed of 54 state, commonwealth, and territorial medical association. These, in turn, are made up of nearly 2,000 component medical societies.

The medical profession's national policy-making body is the House of Delegates of the AMA. Most delegates are elected from state medical societies on the basis of one

Read before the Conference of Medical Society Officers and Committeemen, Pinehurst, Jan. 30, 1970

*Member of the Board of Trustees, American Medical Association.

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delegate for every 1,000 AMA members in the state. The House also includes representatives from 22 different branches of medicine, and from the armed forces and federal agencies.

The House meets twice a year to establish programs and policies. When the House is not in session, the governing body of the AMA is the Board of Trustees, elected by the House from among its members.

More than 800 physicians - each an expert in his field - serve without pay on more than 80 commissions, councils, and committees established by the AMA to study, analyze, and report findings on a multitude of subjects of interest and value to the medical profession.

Just a few of the subjects should suffice to illustrate the broad range of activities of these studies, many of which are of direct interest to the public:

Medical education - medical service - drugs, foods and nutrition - legislative activities - mental health - national security - occupational health - rural health - postgraduate programs for physicians - environmental and public health - medical aspects of automotive safety - medical aspects of sports medicine and religion - nursing - quackery - rehabilitation - and child care - alcoholism and addiction - drug abuse - and scores of others.

Staff work is carried out under the direction of the executive vice president, a full-time physician-executive who directs the operations of about 900 people at the AMA's headquarters in Chicago and in its New York and Washington offices.

The headquarters organization consists of seven major divisions, and includes more than 50 departments and 100 sections. The divisions have responsibilities for management services, scientific activities, scientific publications, social and economic activities, field service with the state and local medical societies, communications, and legal and legislative matters. Staff members include physicians, computer experts, attorneys, pharmacologists, economists, chemists, librarians, journalists, bio-statisticians, artists, physical fitness experts, educators, business administration specialists, hospital administrators, and accountants. There are others, but that gives you an idea of the diversity of talent involved.

Functions

The AMA conducts many programs in its efforts to reach its goal of the best possible medical care for the people of the United States. One of the major programs is continuing recruitment of young men and women into health careers.

Since 1960 the AMA has spent almost one million dollars on its programs to encourage talented youth to follow medicine as a career or to enter more than 20 allied health professions and occupations. Millions of pieces of informational literature have been distributed among students; medical career movies have been shown nearly 100,000 times.

It would be impossible to list, in the time allotted, all of the other services, activities, and materials of the AMA.

Among the most important benefits offered member physicians - and which are of indirect benefit to the public - are scientific meetings, which help to keep the physician informed about medicine in general and his special interest in particular. The AMA sponsors more than 1,000 scientific meetings every year, including the annual convention and the clinical meeting.

Many publications, both scientific and non-scientific, are available to members and to the public. You may be surprised to learn that the AMA is one of the world's largest publishers of scientific material. Of the \$32 million budget, more than \$8 million is spent annually for paper.

The *Journal of the American Medical Association*—famously known as the *JAMA*—has, since 1883, been the most widely circulated medical journal in the world. More than 200,000 copies are circulated each week in more than 100 countries. In addition, each member physician has his choice of one of nine specialty journals published each month and sent to him without charge.

The *American Medical News* is a nontechnical weekly medical newspaper which reaches more physicians than any other medically oriented publication. Almost 360,000 copies are distributed each week.

Also of interest to the physician—and to his patient—is *Today's Health*, a monthly magazine of health articles and tips, and articles of general interest to the public. More

than 700,000 copies are distributed each month.

Others

Other services and programs available to member physicians include extensive library and reference services, legal advice and assistance, hundreds of educational films, exhibits and publications, investigation of and reports on quackery, assistance with business procedures; speaker training; a panel of physician speakers who are experts in specific fields; liaison with government; analysis of proposed legislation; cooperation with allied professional and occupational groups; accreditation of education programs and health care institutions; health education for the public; and many, many more.

Annual dues of only \$70 entitle a member to many tangible and intangible benefits offered by the AMA. Inflation, new programs, and changes in tax on unrelated income will require additional dues in 1971.

We think this is an outstanding bargain, and we hope that physicians will take advantage of the many things the AMA offers you.

Innovative Programs

I have been discussing what the AMA has done in the past and what it is doing today. It now seems appropriate to look at the future of the AMA.

Our national organization is often accused of lagging behind the times—of having failed to enter the 20th century. A look at the AMA's plans, and at programs already under way, will make it abundantly clear that we have indeed entered the 20th century, that we are aware of the problems facing the 1970s and are seeking solutions; that we are taking advantage of modern technology; that we have, in fact, pioneered in many areas.

Electronic communication

One of these areas—and a dramatic one—is the audio-visual field. The entire world is experiencing an audio-visual explosion, and leaders in that field say the full impact won't be felt for another half century. You may know that the AMA was one of the first groups to see the educational possibilities of audio-visual techniques, and to make use of them.

For several years we have used closed circuit TV in medical education and in

training physician speakers. We have developed techniques which have been adopted and adapted by others.

We also have taken advantage of developments in the tape-recording industry, and now offer medical news tapes which can be played by the busy physician as he drives to the hospital, flies to a medical meeting, or relaxes in his home. We are exploring the use of moderate-cost electronic units which would make it possible for the physician to replay TV tapes through his home or office television set, to build up his own library of educational and entertainment tapes, or to obtain tapes from "lending libraries."

We are now exploring new and exciting uses of electronic techniques for health education in public schools and in the physician's office, and elsewhere.

Public relations

Communications in many forms is one of the primary functions of the AMA. This includes communications with the public, with government, with allied health groups, and with its own members.

To improve its communications, the AMA in recent months has launched several programs. It has set up new departments and hired aggressive, imaginative, and talented men and women to implement these programs.

New campaigns have been put into effect to publicize and accentuate the accomplishment and the purposes of the AMA. We are seeking to reach a wider audience of lay persons, including women and young people. We are providing more assistance to our own AMA Auxiliary, to local and state medical societies and their auxiliaries, to professional and lay health groups. We are expanding our educational work in such fields as drug abuse, sex education, alcoholism, auto safety, health careers, smoking and health, safety in the home, factory and auto, and many more.

To increase awareness of AMA services—among both the public and the medical profession—the Communications Division has inaugurated an "account executive program" under which Division staff members are assigned to AMA councils, committees, state and county medical societies, and the like. Their purpose is to

advise Division officers of opportunities to promote and publicize activities of these groups. The Division then provides, when needed, assistance in public relations, and helps in other ways to solve problems involving public relations.

Use of computers

As the AMA moves to modernize and improve its programs and services, it is making ever-increasing use of computers. A roomful of the latest electronic equipment is utilized to keep physician records, file and tabulate statistics, revise records, print directories, and handle volume mailings to members. The Data Processing Department serves not only the AMA, but many affiliated organizations, such as the Woman's Auxiliary, AMPAC specialty organizations, and component and constituent medical societies. It enables the AMA staff to perform countless duties and services with greater speed and accuracy, and at less cost. The Committee on Computer in Medicine is the newest committee of the Board. It will advocate a data collection bank with a uniform nomenclature for diseases and operations. Frequent meetings are being held with all concerned to discuss methodology for initiating such a program.

Public Affairs Division

Answers to many of these problems lie with the federal government, which in recent years has assumed an ever-increasing role in providing and financing health care. This very act of increased participation by government has, in fact, tended to worsen the problem. Such participation must be blamed, in part, for the surging demand for health care and resultant increases in cost. And, as government has assumed this larger role, the AMA has become more involved with legislative activities and socio-economic problems relating to the nation's health care.

The AMA's Public Affairs Division is responsible for the association's governmental and associational relationships. Briefly, the staff in Chicago and Washington works with and advises Congress and administrative agencies, educates physicians and their wives for effective participation in politics and government, analyzes proposed legislation, and, through its Field Service Department, provides a link between the AMA and

individual members, and state and county medical societies.

AMPAC is the vital political arm of the AMA.

It is a separate legal entity governed by its own board of directors. Each of the 50 states and the District of Columbia has a political action committee which maintains liaison with state medical associations.

AMPAC's current and projected programs include numerous research projects, publication of a newsletter, maintenance of a lending library of films and books, and selected programs of political education.

There is an important distinction between political *education*, which can be financed with corporate funds, and political *action* which must be paid for with contributions from individuals. AMPAC's political programs related to education are financed with corporate contributions. All activities in support of candidates are paid for by the voluntary contributions of individual physicians and by others who constitute the AMPAC membership.

I would like to add, too, that AMPAC maintains two separate bank accounts, and give scrupulous attention to the allocation of money. May each of you become knowledgeable in this important field of endeavor. Learn about politics and participate in your local political party of choice. Contribute to the candidate directly, or through Medpac of North Carolina, through State Society billing, or directly to AMPAC. Medicine has the best position ever in Washington. Yes, you still have an opportunity to live and practice as an individual physician. Let us keep it that way.

Policies and Actions

Let me briefly list AMA positions and actions on the major problems mentioned previously.

To help reduce the manpower shortage, the AMA has urged medical schools to expand enrollments, improve the use of existing facilities, and reduce the time required for a medical education, without sacrificing quality. The organization has also urged construction of new facilities as rapidly as possible.

We also have sought to attract young men

and women to careers in the health fields, and have sought to add new dimensions to the roles already played by allied health personnel by increasing their education, duties, and responsibilities. The AMA also has strongly supported increased federal appropriations for education in health careers. Recently we reiterated the policy of training more nurse assistants in the hospital and office.

To halt or reduce the increase in health care costs, the AMA is cooperating with other organizations to find ways in which costs can be reduced. It urges physicians to eliminate or reduce hospitalization where possible, utilize less expensive facilities, and exercise restraint in raising their own fees. The AMA also is seeking to educate the public concerning ways in which the public can reduce unrealistic demands that inflate costs.

To finance health care, the AMA supports legislation now before Congress which would provide tax credits and certificates toward payment of health insurance premiums. The plan involves a sliding scale of tax credits based on the individual's tax liability. Credit would be used toward purchase of health insurance from private carriers, under a voluntary system. Under this plan, the federal government would not control health care delivery, but would provide financial incentives toward the purchase of adequate insurance by all Americans.

In keeping with its 123-year-old goal of "improving the public health," the AMA is seeking ways to provide adequate health care for the poor in both rural and urban areas. Through its Committee on Health Care of the Poor and other councils and committees, the

AMA is preparing specific recommendations for alleviating the health care and malnutrition problems of this segment of the American population.

Since alcoholism and drug addiction have become top-priority health problems, the AMA's Committee on Alcoholism and Drug Dependence and the AMA's Department of Health Education, have developed extensive programs dealing with education and treatment in these areas.

Another top-priority problem is environmental pollution in all its forms—water, air, land, and the more recently recognized health hazards of noise. The AMA's Council on Environmental and Public Health has sponsored a number of national conferences on this problem, and the organization also is working closely with government and private groups which are seeking to reduce pollution.

Conclusion

Any discussion of the AMA must recognize that the problems of the future and the future practice of medicine, will be vastly different from the problems and practice of today.

But it seems to me that one thing will not change. The physician of the 1970s, of the 1980s—indeed, as far as we can see into the future—will still be using his knowledge, his skills, and the tools available to him to improve the health of his fellow human beings.

And it is the intention of the AMA to continue to promote the art and science of medicine, and to improve the public health.

Tensile Characteristics of Human Hair and Some Effects of Hair Spray

DAVID G. WELTON, M.D. and WALTER E. NOREM, PhD.

For centuries man has been concerned with the appearance (and disappearance) of the hair on his head. In order to enhance his general appearance and to keep up with the ever-changing styles, man has subjected his hair to brushing, combing, washing, rinsing, drying, curling, teasing, and straightening, and to the application of tints, dyes, oils, powders, sprays, and many other chemical preparations. Some of these treatments may alter physical characteristics of hair—such as its breaking strength, ductility (extensibility), or toughness, and thereby may play a role in certain disorders of the hair and scalp.

While there are numerous reports in the engineering and other technical literature about measurements of various physical characteristics of hair and its mechanical behavior under stress, there are few such reports in the medical literature of the last 15 years. An exception is Price and Menafee's recent report that dimethyl sulfoxide in concentrations of about 80% produced a marked increase in the stress relaxation of human hair.¹

Presented herein are (1) a brief review of the structure of human hair; (2) a description of the chemical composition and properties of hair sprays; (3) a discussion of the tensile properties of engineering materials; and (4) a report of an experimental procedure in which tensile characteristics of normal hair were studied before and after the application of hair spray.

Structure of Hair

A human hair may be visualized as a complex fiber composed (Fig. 1.) of a thin, outer layer, its "cuticle," then a cylindrical

mass of fibrils or "cortical cells," and an inner core or "medulla."² A diagrammatic representation at various levels of magnification is shown in Figure 2.³

Editorial comment on page 192.

Keratin, the basic structure element of human hair, is a fibrillar material composed of partially cross-linked polypeptide polymer chains (amino-acids coupled with peptide links) which are lined up along the fiber axis. When parallel to one another, these chains are cross-linked by SH and H bonds.

In the normal unstretched hair, these polypeptide grids are arranged in a regularly folded pattern, and are said to be "buckled" or "kinked." This arrangement is referred to as alpha keratin.⁴ Stretching such a fiber involves the unbuckling of polypeptide chains and accounts for the fiber's elasticity. When unbuckled or flat, the configuration of these grids is called beta keratin. The strength of hair is related to the strength of its peptide bonds. Bull and Gutman⁵ state that when a hair is stretched from 3% to 20%, the process resembles a thixotropic gel-sol transformation. (Thixotropic is the property exhibited by certain gels of becoming fluid when shaken and then becoming solid again. A gel is a colloid firm in consistency though containing much liquid, i.e., a "gelatinous form.")

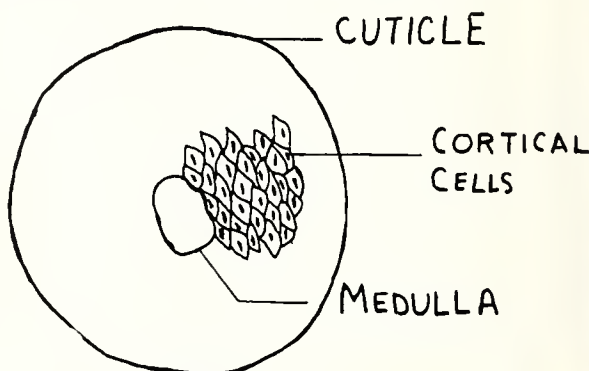


Fig. 1. Cross-section of a human hair. (From Bouthilet, Karker, and Johnsen²)

Read in part before the American Dermatological Association, Dorado Beach, Puerto Rico, April 6, 1968.

*Dr. Welton is in private practice in Charlotte, and is Clinical Associate, Department of Dermatology, Duke University Medical Center.

**Dr. Norem is Associate Professor of Engineering Materials, University of North Carolina at Charlotte.

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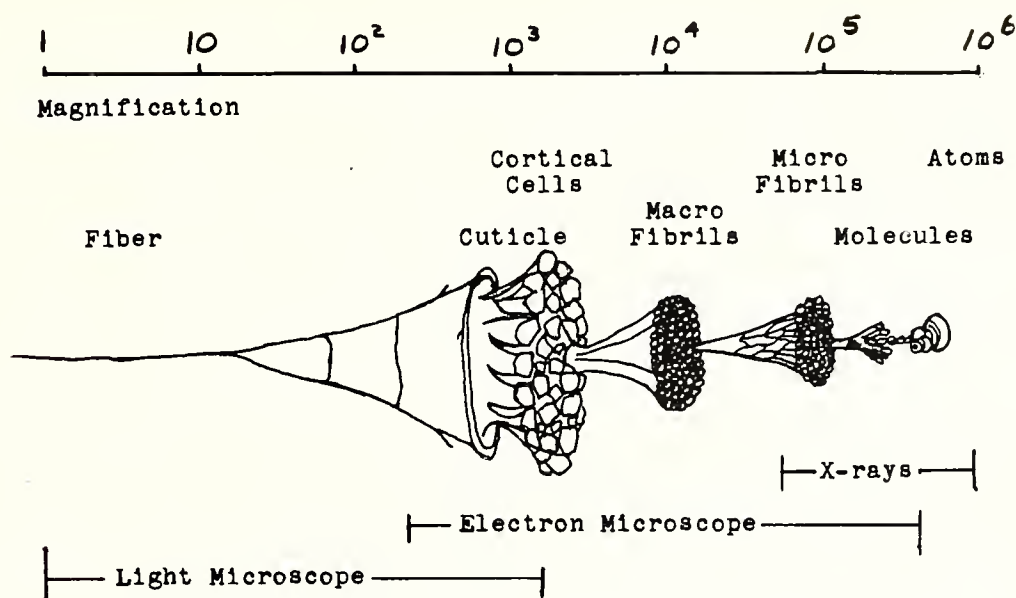


Fig 2. Diagram of a hair fiber at various levels of magnification. (From Couchet³)

In Figure 2, the fibers down to the molecular level are seen to be held together by chemical bonds, and it is these bonds which are attacked and disrupted by bleaching and waving chemicals. Hair spray preparations are much milder chemically and probably do not penetrate the hair shaft very far, if at all.

Hair Sprays

More than 500 million cans of hair spray were produced in the United States in 1969. Eighty-five per cent of women use it; 50% of these use it every day or oftener! Men are using it in 10% of homes.⁶ It is probable that more hair spray is applied to more heads per day in our country than any other preparation intended for the hair.

Before the advent of the aerosol, shellac was the primary resin used in hair-holding preparations. As used in industry today, the word shellac refers to all forms of processed lac. Lac is a unique natural resin of animal origin.⁷ It is the secretion of the female insect, *Laccifer lacca* (family Coccidea), which is parasitic on certain trees and bushes in India, Burma, and Thailand. The secreted resin functions as a protective covering for the insect's offspring. An organic, amorphous solid, it is characterized by a high luster and the ability to form a smooth, flexible film

which adheres nicely to a variety of materials including pills, pretzels, and people's hair.

The first aerosol hair sprays marketed in 1949 contained shellac. Although their hair-holding quality was good, these films became "tacky" on drying, and it was extremely difficult to remove them from the hair by shampooing because they were not water-soluble. The most significant advance in the formulation of hair sprays was the introduction, in 1953, of the synthetic water-soluble resin, polyvinylpyrrolidone,* or PVP^{8/9} (see Fig. 3).

Following this development, hair spray formulations gradually evolved into

*By the General Aniline and Film Corporation, New York

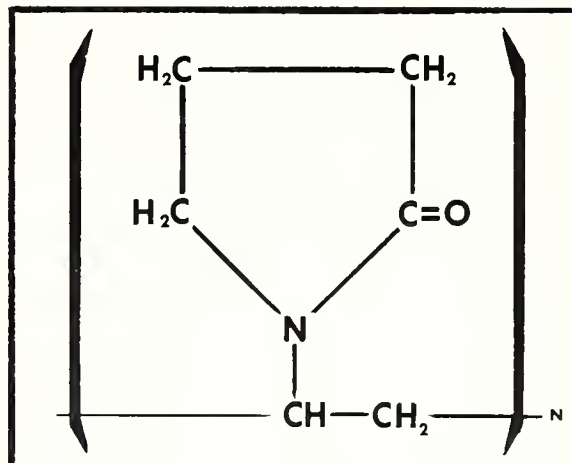


Fig. 3. Molecular structure of polyvinylpyrrolidone (PVP).

non-lacquer products containing synthetic resins. Polyvinylpyrrolidone may first be remembered in connection with its dramatic use as a blood plasma extender. Among its numerous industrial applications are pharmaceuticals, detergents, adhesives, coatings, beverage clarifiers, and textiles.¹⁰ Its use in cosmetics is based on its functions as a film former, dispersant, protective colloid complexing agent, adhesive, and binder. In shampoos it is used to improve the foaming action and to make the hair more manageable; in hair dye formulations, to enhance the appearance of the hair and to help carry and fix the dye; in shaving creams, to stabilize the lather and to improve its spreading characteristics; in after-shave lotions, to take out some of the sting and to make the face feel smoother. Additional products into which it may be incorporated are sun-tan lotions, hand lotions, dentrifices, lipsticks, and deodorants.¹¹

Because PVP is physiologically inert, it has proven very useful in pharmaceuticals. PVP, for example, is said to stabilize aspirin by decreasing the amount of free salicylic acid which may develop while "on the shelf." It is also used to prolong the shelf life of many antibiotic preparations. It is a diagnostic tool in the exudative enteropathies. Today PVP and its copolymer carboxylated polyvinyl acetate (PVP/VA) are the most commonly used resins in hair sprays in the United States.¹² A basic hair spray formulation is found in Table 1.

In applying such a preparation to hair, the object is to coat each strand with a smooth transparent film which adheres firmly, but is easily removed by shampooing. Hair thus treated becomes smoother, more lustrous, and more manageable. It is said that a small amount of PVP may actually enter the hair shaft and stay there despite washing. The ability of hair spray to hold the curl of hair is its most important property.¹³

The greatest single deterrent to curl retention is high atmospheric humidity. PVP films are sensitive to humidity extremes. In very dry weather they become brittle and tend to dust and flake off during combing; in high humidity, they deliquesce and become tacky and undesirably sticky. This problem led to the increasing use of PVP

Table 1
Hair Spray Formula

Ingredient	Parts by Weight
PVP or PVP/VA	2.0 or 4.0
Alcohol soluble lanolin	0.5
Perfume	0.5
Ethanol (SDA-40 anhydrous)	22.2
Plasticizer	0.2
Propellants 11/2* (70/30)	75.0

*Fluocarbon 11=trichloromethane

Fluocarbon 12=dichlorofluoromethane

copolymerized with varying quantities of vinyl alcohol. The higher the ratio of vinyl alcohol to PVP, the less hygroscopic is the resulting polymer. However, since resins with 50% or more of vinyl alcohol are quite brittle and are not as substantive to the hair, these formulations are limited. Atmospheric relative humidity in excess of 50% is common in some parts of the country, including the Southeast where, in addition, many women are employed in textile and hosiery mills which maintain a high relative humidity in certain work rooms.

Shellac is still included in the formulation of separate aerosol preparations—hair lacquers—which are used by beauticians to mold and sustain "fantasy hairdos," and to achieve the "sculptured look."

Plasticizers are added to hair spray formulations, because they soften and impart flexibility to the resin film deposited on the hair by the spray.¹³ Without plasticizers, the resins commonly used in hair sprays would form a brittle film which would not perform acceptably. They also help to reduce the hygroscopicity of the resins, minimize tackiness, and improve sheen, luster, combing ease, and of curl softness. Effective concentrations expressed in percentage of the total resin solids, range from 10% to 26%. (They are ineffective below 10% and sticky above 26%).

Newer synthetic resins such as the Gantrez group,¹⁴ Dicrylan, * Resyn 28-1310,† and VEM 640‡ are gaining acceptance in hair spray formulations, because they possess a number of desirable characteristics such as providing a hard film, high luster, less

*Ciba, Corporation, Summit, N.J.

†National Starch and Chemical Corp, Resin Division, N.Y.

‡G. Barr Co., Division of Pittsburgh Railways Co., Niles, Ill.

tackiness at high humidity, easy combing, good holding power, and no flaking. They are insensitive to humidity, while being readily soluble in water and ethanol.

Tensile Properties of Engineering Materials

One of the most common tests of the mechanical behavior of materials is the standard tensile test. Here a long thin sample with uniform cross-section is subjected to an axial force as shown in Fig. 4a. As a result of the force the material is lengthened and there is a slight decrease in cross-sectional area. The relationship between the applied force and

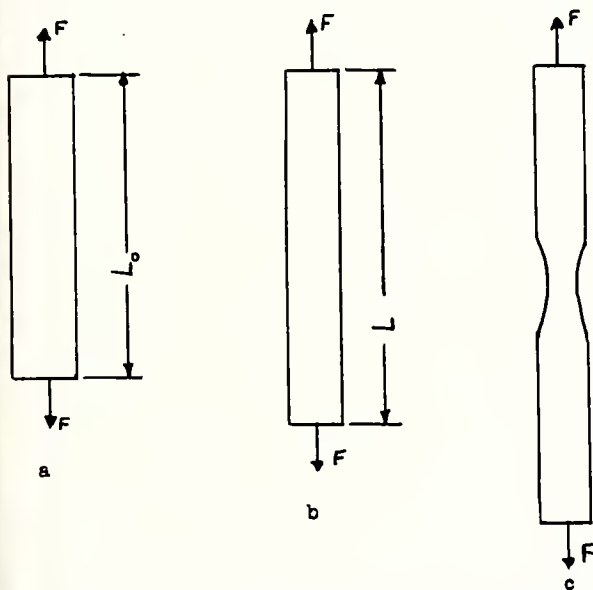


Fig. 4. Tensile specimen during various stages of test.

the resulting deformation is an indication of the mechanical behavior of the material.

If the material is homogeneous, the force will be uniformly distributed over the cross-section. The intensity of this force is a vitally important aspect of it. This intensity, called the stress, is numerically equal to the force divided by the cross-sectional area.

The commonly used units of stress are pounds per square inch (psi), kilograms per square centimeter, and grams per square millimeter, although other systems have been developed for specialized uses. Many investigators in the fibers field prefer to use grams per grex, a grex being one-thousandth of a square millimeter.

If the material deforms uniformly, the convenient measure of deformation is the

change in length per unit length of the sample. Thus if a sample had an original length L_0 , and as a result of the stress had stretched to some new length L (see Fig. 4b), the strain is given by

$$e = \frac{L - L_0}{L_0}$$

While the strain is measured in units of inches per inch, in many cases this is expressed as per cent elongation, i.e., .04 inches/inch=4% elongation.

If the material is homogeneous, and if the strain occurs uniformly throughout the sample, the relationship between stress and the resulting strain for a particular material is the same and is totally independent of the sample size or shape. The actual deformation resulting from a particular force will, of course, depend upon the sample geometry.

A stress-strain curve for a typical structural material is shown in Figure 5. Generally three different types of mechanical behavior occur during the process of the test. Initially one observes elastic behavior; i.e. if the load is removed the sample will return to its original

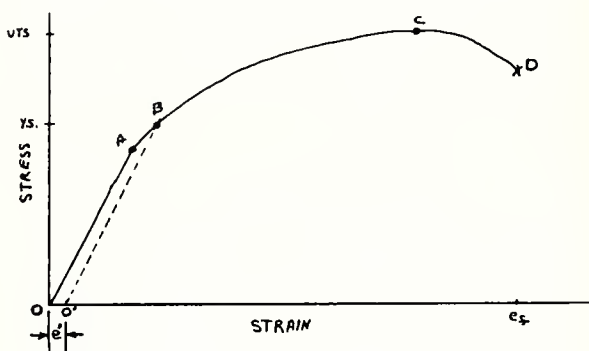


Fig. 5. Stress-strain curve for typical structural material.

length with no permanent deformation. Such behavior occurs approximately between points O and A on Figure 5. Generally this part of the curve is a straight line, the slope of which is called Young's modulus, the elastic constant, Hooke's constant, or simply the elasticity. Such straight line dependency follows Hooke's law, which states that for elastic behavior the stress is proportional to the strain. The maximum stress at which behavior is totally elastic is called the elastic limit.

Point B in Figure 5, this elastic limit, also referred to by engineers as the "off-set yield

point," is the point at which the curve starts to deviate from linearity. It is found by drawing a line parallel to the straight line portion of the curve but off-set by some small (such as 1%) strain, e' . (Line O'-B, Fig. 5). The intersection of this line with the stress-strain curve is a good approximation of the limit of elastic behavior. The engineer defines off-set yield stress as the stress required to produce some arbitrary, small amount of permanent strain.

Between points A and C of the curve the material deforms uniformly but the strain is permanent or plastic; i.e., if the load is removed only the strain which took place below the off-set yield stress will be recovered.

Beyond Point C the material begins to deform nonuniformly, with some sections of the sample deforming more than others. Since the extension is accompanied by a decrease in cross-sectional area, these points of localized strain will have smaller cross-sectional areas and thus greater stresses than the rest of the sample. The greater stress will enhance localized strain and further decrease in area, with a subsequent increase in local stress. The sample will very quickly "neck down" as shown in Figure 5 and fracture at the point of localized strain.

For practical purposes it is convenient to define the stress in terms of the original cross-sectional area. Thus, while there is a localized increase in stress at the necked section, the force required to produce further strain actually decreases, and the apparent stress (based on the original area) decreases.

The maximum stress which the material can withstand, that corresponding to point C, is called the ultimate tensile strength, or often just the tensile strength of the material.

The total strain at the fracture point (fracture strain) is a measure of the ductility of the material. A brittle material has a low fracture strain, a ductile material a high fracture strain. Often ductile materials are said to be highly plastic, indicating that they can undergo a great deal of plastic strain.

Another property which often indicates the resistance of the material to impact and dynamic loads is its toughness. The total area under the stress-strain curve, called the modulus of toughness, is the energy required

to break a unit volume of the material. Thus the toughness would be high if both the tensile strength and the strain at the fracture point were high.

In the literature on fibers and hair, stress is not universally used as a measure of the force on the sample. There are two other systems which have been quite widely employed.

Some of the previous investigators working with hair have used the force alone. In individual measurements no attempt was made to take into account variations in the areas of the samples. In the present investigation the sample diameters varied from 0.04 to 0.12 mm, giving a tenfold area variation. Such a variation is significant, and should be taken into account. In defense of these other studies, however, it may be possible to make qualitative relative comparisons of properties under various conditions, using statistical analysis of a very large number of samples. The scatter within each group would be extremely large, and it would be impossible to determine whether any of this scatter were due to factors other than variations in diameter. If the distribution of diameters were the same in all groups studied, it might be possible to make meaningful comparisons of average values of different properties.

The fibers industry is faced with a twofold problem. The densities of different strands of identical fibrous materials depend upon the force used to twist the individual fibers into the strand, or on the tension used in spinning threads from the fibers. Different strands of the same weight and number of fibers should have identical mechanical properties, although they have different diameters and cross-sectional areas. Additionally, many commercial fibrous materials are purchased on a unit weight basis. For this reason textile strength is often reported in units of grams per denier rather than force per unit area. A denier is a measure of weight per unit length (one denier is a yarn 9,000 meters long, weighing one gram). It can be shown that such a unit of strength is proportional to stress units if the density (and thus the degree of fiber packing) is a constant. These units are most convenient when one wishes to calculate the force required to break a strand of yarn made from a particular amount of fibrous

material. The degree of packing and the strand diameter are not the important factors; the weight per unit length of fiber is the important factor to the textile industry.

In this system of units, tenacity is the fracture force divided by weight per unit length (denier).

Experimental Procedure

The 20 participants selected as hair donors for the study were Caucasian females, between the ages of 17 and 23 years, with naturally brunette hair which supposedly had not been treated with wave lotion or bleach for at least three months. Eight of them were student nurses, group A; 12 were novices or junior sisters in a convent, group B. The living environment and daily activity schedule of the group B participants was probably more regulated and uniform than for those in group A.

After an initial preparatory period of two weeks, during which the participants used nothing on their hair except a bland shampoo (Soy Dome Liquid Cleanser, Dome Laboratories), the first set of normal samples were taken. A second set of normal samples was taken four weeks later. All samples were taken from the vertex area of the scalp; they ranged from four to six inches in length; a gauge length of two inches was used in the testing. Samples were kept and tested in a controlled environment of 50% relative humidity and temperature of 71-74 F.

The participants were then supplied with a commercial hair spray of the "hard-to-hold" type, and instructed to apply it liberally to the test area of the scalp once a day. Sprayed samples were taken at the end of two weeks' and again at the end of four weeks' usage. At least three strands of hair from each participant were measured for each of the four sampling periods.

This study was designed to measure certain mechanical properties of normal (untreated) and sprayed human hair by determining its stress-strain diagram. These stress-strain curves were automatically plotted on an Instron electrically loaded universal testing machine (Figure 6). The ends of the hair samples were held by two pairs of rubber-coated pneumatic grips. (Figs. 7 and 8). One pair of grips was attached to an electronic load cell which was



Fig. 6. Instron Universal Testing Machine, Floor Model T T.

firmly bolted to the top frame of the machine. The bottom grips were attached to a cross-head which could be removed vertically at variable speeds.

The instrument is designed so that the electrical output signal from a system of strain gauges within the load cell is precisely proportional to the load applied to the sample. For the load ranges used in this investigation, the accuracy and precision of the force measurements were within 0.1%. The load cell output signal was used to drive a pin along the load axis of the instrument's X-Y plotter. The load scale amplifier circuit included a variable potentiometer which was set for each sample to automatically divide the load by the sample area. Thus it was possible to plot the stress applied to the sample.

The movable cross-head was lowered at 0.2 inches per minute during the test, giving a relatively low strain rate of 0.1 inches per



Fig. 7. Instron pneumatic action grips, G-61-3B, with rubber-coated surfaces.

inch per minute. The motion of the recorder pen along the strain axis was electrically coupled to the cross-head motion. Thus it was possible to automatically plot a stress-strain curve for each sample. The accuracy of the strain measurements was comparable to that of the load measurements.

The greatest limit to accuracy of the stress measurements was associated with the measurement of the cross-sectional area. It is known that a hair is not a perfect long, thin cylinder or rod. Rather, the cross-section is elliptical and varies in diameter along the length of the hair. Additionally, one might suspect that variations in the hair would produce a nonuniform distribution of stress—a supposition born out by the experimental results.

Microstructural analysis indicated that the eccentricity of the elliptical cross-section was fairly low, and that it would not be unreasonable to assume the section to be circular and to use some average diameter in

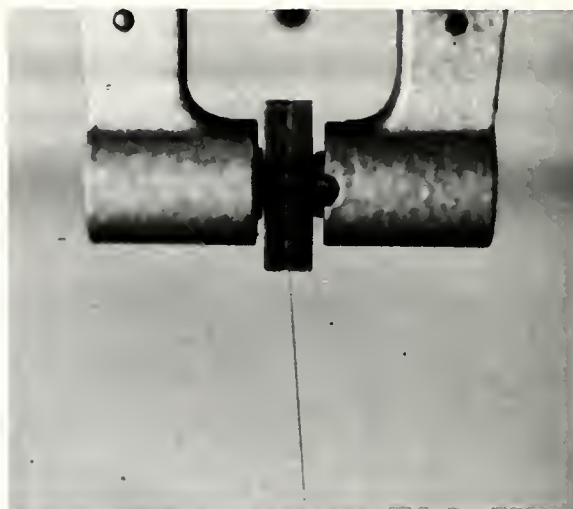


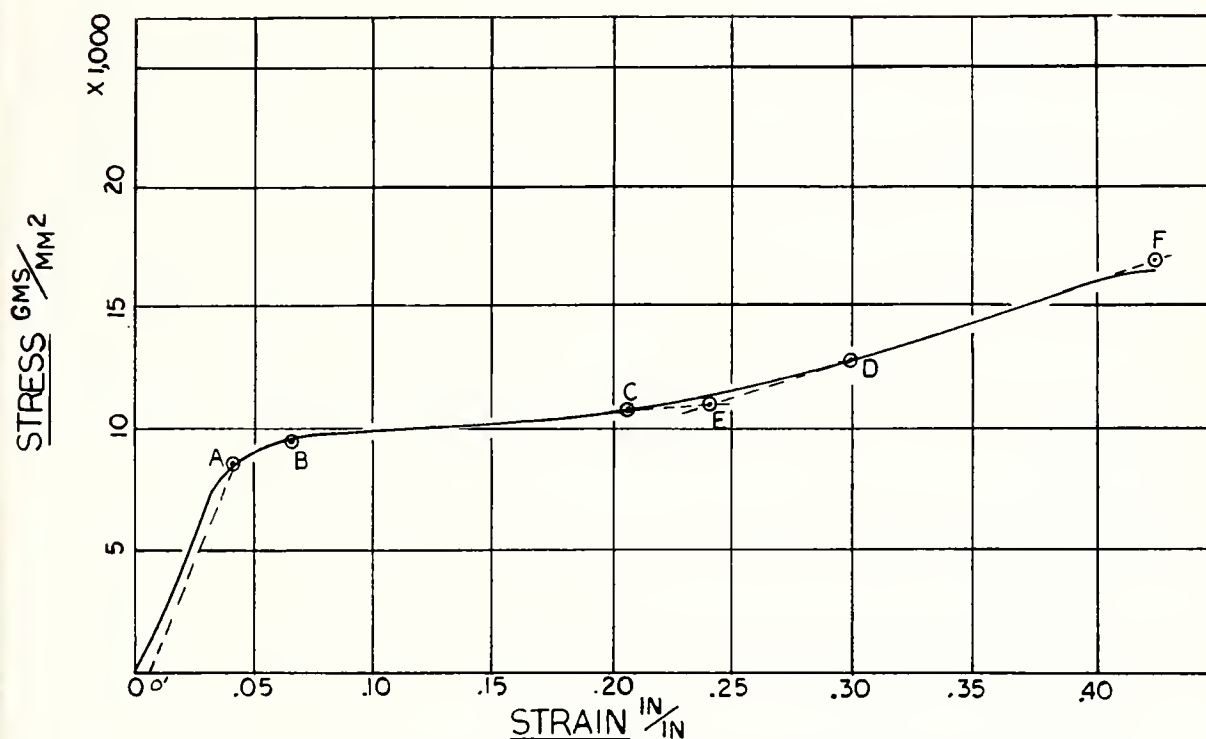
Fig. 8. One end of hair sample, ready for testing, being held by pneumatic grip with rubber-coated face.

calculating the area. The diameters at several points along the central 2 inches of the sample were measured with a micrometer microscope, with individual measurements having an accuracy of approximately 1%. On each sample at least three diameter measurements were made and the average of these was used to calculate the cross-section area. For most samples, these measurements did not vary by more than 4% from the mean. This would suggest that the idealization of a constant circular cross-section was not unreasonable. In fact, if any individual measurement varied by more than 8% from the average, or if there was any microscopically noticeable irregularity in the shape of the hair (localized bulges, kinks, cracks, etc.), the sample was not used.

Stress—Strain Curves

Because of the complexity of its organic structure, the mechanical behavior of human hair is not simply elastic, although it apparently obeys Hooke's law over a short interval of stress. Instead, like many other polymeric materials, hair is viscoelastic; i.e., it exhibits a mechanical behavior somewhere between that of elastic solids and that of Newtonian fluids. Mechanical properties of hair may be affected by the temperature and humidity of its environment, by the application of certain chemicals in shampoos, dyes, wave lotions, sprays, etc., and by the physical regimen to which it has been

SAMPLE A-2-5-1

AREA = $0.509 \times 10^{-3} \text{ mm}^2$ 

TYPICAL STRESS-STRAIN CURVE FOR HUMAN HAIR

Figure 9

subjected (such things as teasing, use of rollers, etc.)

Before analyzing the specific values of the various mechanical properties, it would be well to discuss the qualitative features of the stress-strain curve obtained from most hair samples.

A typical stress-strain curve for a hair sample is shown in Figure 9. In comparison with the curve shown in Figure 5 for a common ductile material some striking similarities and noticeable dissimilarities are apparent. Figure 9 shows three distinct regions of behavior. The linear region OA is identical with that discussed previously. It appears that the upper limit of this region also represents the limit of elastic behavior, and that strain which occurs above point A is principally plastic. (Point B in Figure 9 does not correspond to Point B in Figure 5). The

curve between points B and C, however, appears to be much more linear than that observed in many other materials. This suggests that between these points only one mechanism for plastic strain is operating and that the strain is quite uniform.

There is a third region of behavior which is dissimilar to that observed in other materials. This region between points D and F is also quite linear but its slope is significantly higher than that of the second region. The linearity again suggests uniform strain and a single mechanism for deformation. Since the slope of this part of the curve is higher than that of the second region, one would suspect that a different mechanism is involved and that this second mechanism requires a greater stress to produce deformation. It has been previously suggested that keratin, the principle molecule in hair, can exist in two forms, and that the

transition from one form to the other is influenced by temperature humidity, and chemical environment. It has been further suggested that the transformation can be induced by stress. If the molecules of one form were longer and thinner than those of the other form, it would follow from leChetalier's principle that if the molecules of the first form were longer and thinner than those of the other form, the first form might be more stable under a state of tensile stress. This could easily explain the two distinct

section D-F indicates the behavior of the third stage of mechanical behavior. The stress and strain at F are the ultimate properties of the sample, since they are the fracture properties of the hair.

It is important that in some cases there was a slight leveling off of the curve just before fracture. Thus there was only a very small amount of localized deformation corresponding to the necking phenomenon. The extensive linearity of both the second and third stages of deformation strongly

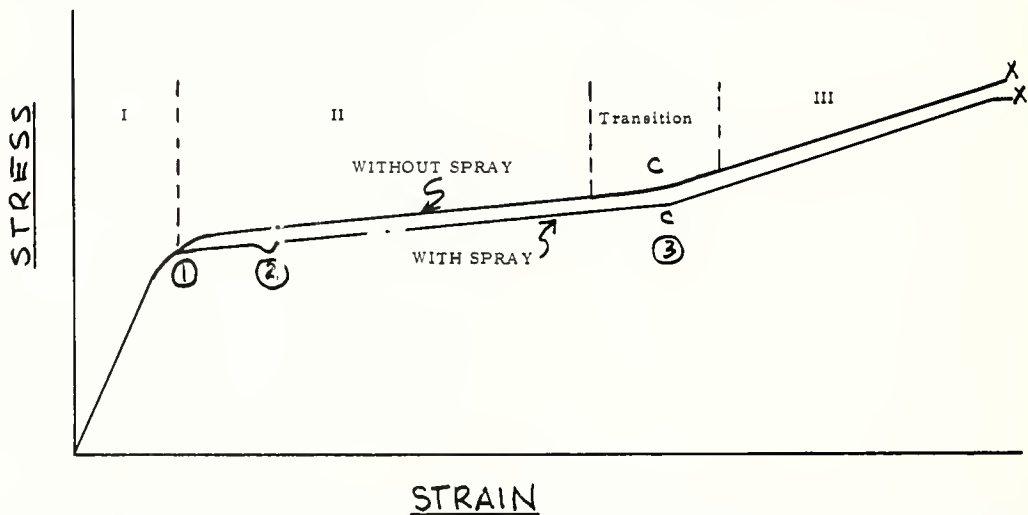


Fig. 10. Diagram showing qualitative differences in the mechanical behavior of sprayed and unsprayed hair samples.

mechanisms for plastic deformation seen in the stress-strain curve. Region B-C would correspond to deformation of one form and D-F to deformation of the second form. The stress-induced transformation would appear to occur over the relatively short range from points C to D on Figure 9.

A number of mechanical properties can be obtained from the stress-strain curve. As measures of the elastic behavior, the stress and strain at the yield point A and the slope of the elastic portion of the curve were obtained. The slope of segment B-C and the stress and strain at E are indicative of the nature of the second stage of deformation. The coordinates of E give the upper limits of the second stage of behavior; and one is particularly interested in observing the effects of various treatments upon this point, if it does indeed represent the transition from one form of keratin to the other. The slope of

suggests that all the deformation took place uniformly throughout the sample, and that except for the short transition from C to D only one mechanism was operative in each stage.

Results

A. Qualitative Effects on the General Shape of Stress-Strain Curves

1. In the sprayed samples, at a point slightly above the elastic limit, the stress-strain curve turns almost horizontal (point 1) for a short distance (see Fig. 10). The strain at this point is approximately 4.5%. At point 2, where the curve makes a small dip, the strain is approximately 9% and following this dip the curve appears to increase linearly, parallel to the curve for untreated hair. At fracture, the elongation is 45%.

Table 2
Changes in Mechanical Properties of
Hair After Spraying

Property*	Group A			Group B			
	Normal	Sprayed		Normal	Sprayed		
		2 wks	4 wks		2 wks	4 wks	
Fracture stress	21.71	22.31	10.19	24.63	25.43	28.67	
Fracture strain	44.41	45.83	45.13	44.11	47.06	46.95	
1% yield stress**	11.61	11.69	10.59	13.30	13.39	15.01	
Stress at point C†	14.24	14.15	13.43	16.50	16.12	18.21	18.21
Strain at point C	23.97	24.40	24.33	24.33	24.28	23.92	
Elastic constant††	370	342	310	378	397	472	

*All stresses and the elastic constant have units of grams per grex (grams per $\text{mm}^2 \times 10^{-3}$). All strains have units of per cent elongation (inches per inch times 100).

**An indication of the limit of plastic behavior.

†Point C is the transition point between the two different types of plastic behavior.

††Same as Young's modulus, elastic modulus: slope, stage 1 of the curve.

Statistic. 1 note regarding the general levels of precision: for the stress values given, the relative standard error of the mean was 4% to 6%. For the strain values, the relative standard error of the mean was 1.1% to 1.5%.

2. The curve for hair which had not been sprayed exhibits a transition range between the second and third sections of the stress-strain diagram (area 3, upper curve, Fig. 10). For the sprayed samples, however, this transition region is either much shorter or nonexistent, indicating that the change in behavior from region II to region III occurred abruptly. This finding suggests that the spray may have affected the means by which the hair keratin changed from one form to another.

3. Shortly before fracture the stress-strain curves for the treated samples appear to flatten out somewhat. This indicates that some localized necking is taking place—a phenomenon not observed in the untreated hairs.

B. Quantitative Effects on the Stress-Strain Diagram

Table 2 shows the average values of selected mechanical properties for each group.

Observations on Results

In general, the hairs of the participants in group A (student nurses) were not as strong as those provided by the participants in group B (novices and junior sisters). This is indicated by the finding that all normal stresses in group B were higher than those for group A. One may only speculate that this might have

been due to the possibility that group A participants had indulged in more teasing and use of rollers, wave sets, or other preparations prior to the project period than had the members of group B. The normal values compare favorably with similar measurements reported by others.¹⁸

In examining the effects of hair spray, the sprayed samples from group A showed no major difference from that group's normal samples. But in the sprayed hairs from group B, there was a steady increase in stress. The above speculation stated might also apply here.

A similar pattern was found in the values for 1% yield stress and for stress at point C; i.e., a steady increase in group B, but very little difference in group A.

The use of hair spray appeared to increase ductility (total strain), as indicated by the fracture strain in both groups.

There was very little effect upon strain at point C—where the transformation from alpha keratin to beta keratin occurred. This means that while hair spray did affect the mechanism of transformation, it did not affect the property changes which resulted from that transformation of one type keratin to another.

In examining the values for the elastic constant (the slope of stage I of the curve), group A samples showed a steady decrease, whereas those from group B showed a steady increase. We are unable to explain this, but

recognize the possibility that unauthorized teasing might have contributed to this finding.

It is significant that the spray qualitatively affected the region of the stress-strain curve corresponding to the transition from stage II to stage III behavior (point C, Fig. 10). The normal hairs showed a rather long gradual change from II to III, while the sprayed samples changed rather abruptly. If this transition is associated with a strain-induced A to B transformation in keratin structure, the spray is seen to have two effects on the mechanism of the transformation. (1) The beginning of the transformation is suppressed or delayed since the curve starts to deviate from stage II linearity at a higher value of the strain. (2) However, once the transformation starts to take place, it occurs much more rapidly than in the normal hairs. This second observation is evidenced by the rapidity with which the curve approaches the linearity of stage III after passing point C.

Conclusions

In comparing selected mechanical properties of untreated hair samples with samples which had been sprayed, significant differences were found in those of the group B participants. Their hairs showed a definite increase in (1) fracture stress, (2) 1% yield stress, (3) stress at the transition point C and (4) the elastic constant, and (5) in fracture strain. These changes indicate an increase in both strength and ductility.

Although they exhibited a slight increase in ductility, group A samples did not follow the group B pattern, but showed a decrease in the elastic constant. We are at present unable to explain this difference; additional study and analyses are being conducted.

The strain at point C remained almost constant in the untreated and treated samples in both groups.

There was a qualitative change in the stress-strain diagram which suggested that the mechanism of deformation was affected by the application of hair spray.

Finally, it is noted that these findings pertain only to the use of hair spray formulation over a short period of time. Similar measurements of hair samples subjected to daily application of hair spray for a long period of time, and of samples

subjected to other hair spray formulations may show different results.

Acknowledgements

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2. Charlotte Memorial Hospital Nursing Education Department. Six students from the University of North Carolina at Charlotte, affiliated with Charlotte Memorial Hospital, participated.
3. Presbyterian Hospital School of Nursing. Two senior students participated.

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Glossary

Denier. A unit of weight indicating the finess of fiber filaments and yarns, both silk and synthetic, and equal to a yarn weighing 1 gm per 9,000 meters.

Elastic modulus. The slope of the curve; i.e., stress divided by strain.

Elastic limit. The maximum stress at which behavior is totally elastic.

Grex. One thousandth of a square millimeter.

Hooke's law. The stress on a solid substance is directly proportional to the strain produced, provided the stress is less than the elastic limit of the substance.

Le Chetelier's principle. A system displayed by a force from its equilibrium state will try to move in such a way as to offset the force.

Modulus—of a fiber. Stress divided by strain when dealing with small deformations in which the stress is proportional to change.

Newtonian fluid. One whose viscosity is independent of the state of stress.

Strain. Change in length of a fiber divided by its original length.

Stress. Force per unit of cross-section area.

Stress relaxation. The "decay of stress" in a fiber held stretched at a fixed extension (units of time).

Tenacity. Fracture force divided by weight per unit length (denier).

Tensile strength. The maximum load (or force or stress) per unit (cross sectional) area which the material can withstand.

Thixotropic. The property exhibited by certain gels of becoming fluid when shaken and then becoming solid again. *Gel.* A colloid firm in consistency though containing much liquid; i.e., a gelatinous form.

Asteroid Hyalosis and the Blood Glucose

JOHN A. STANLEY, M.D., and D. GERRY MARTIN, M.D.

Asteroid hyalosis is a benign, generally unioocular condition in which myriads of small matte white spherical bodies are found suspended in the vitreous. The etiology and predisposing factors are unknown; however, the incidence increases with age. The condition is usually an incidental finding on routine ocular examination; nevertheless, it presents a striking and unmistakable picture when seen with the ocular biomicroscope (slit lamp), where the bodies sparkle in the intense reflected light.

Asteroid bodies, usually less than 0.5 mm in diameter, are nearly perfect bone-white sperules suspended within a clinical healthy vitreous body. As there is usually no sign of inflammation in the vitreous body or anywhere else in the eye with asteroid bodies, the old and still popular term "asteroid hyalitis" seems inappropriate to designate the condition. We prefer, together with Luxenberg and Sime,¹ to call this entity "asteroid hyalosis." After cataract surgery the bodies in the anterior portion of the vitreous appear to have a halo, or thin coat of brown pigment, presumably of iris origin. In aphakic eyes there may be mild signs of vitreous inflammation, such as a few white cells and vitreous condensations seen with the biomicroscope, but it seems likely that the asteroid bodies are coincidental to the postoperative inflammation. It has been

shown² that the asteroid body stains metachromatically, therefore is negatively charged, and is probably composed of an acidic lipid bound to calcium, which renders it insoluble to most lipid solvents.

In this paper blood glucose values in patients having asteroid hyalosis are compared with age- and sex-matched blood glucose values in a control group, in an effort to resolve the controversy concerning the association of asteroid hyalosis and diabetes mellitus. Nearly all authors writing previously on this subject³⁻⁵ have concluded that the incidence of diabetes mellitus is increased in patients having asteroid hyalosis. With one notable exception, published after the completion of this study (see discussion) none of the previous studies included a control group in which comparable blood glucose tests were done.

Elderly patients with asteroid hyalosis were labeled as having or not having diabetes mellitus on the basis of glucose tolerance tests, with norms derived from a much younger population. By comparing blood glucose values in a test group and a control group, and not labeling patients as diabetic or not diabetic, we avoid the unresolved problem of proper criteria for the diagnosis of diabetes mellitus in the elderly.

Method

One hundred patients seen in the Ophthalmology Department of the Cleveland Clinic were found by slit lamp biochemistry and direct ophthalmoscopy to have asteroid

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hyalosis of one or both eyes. Each of these patients had blood glucose determinations made two to five hours after a meal. A control group was assembled by selecting 100 patients newly admitted to North Carolina Baptist Hospital, exactly matched to the study group by age and sex.

Results

The control and asteroid hyalosis groups are compared at three levels of blood glucose; that is, greater than 115 mg/100 ml, greater than 120 mg/100 ml, and greater than 140 mg/100 ml. The table shows that in the control population, 38% had two to five-hour postprandial blood sugar values in excess of 115 mg/100 ml, while 40% of our patients with asteroid hyalosis had similarly elevated blood sugar values. Taking blood glucose values in excess of 140 mg/100 ml, we found an incidence of 12% in the controls and an incidence of 15% in the patients with asteroid hyalosis. It is clear that there is no difference in blood glucose of patients with asteroid hyalosis and that of 100 matched hospital patients.

Of the 100 patients with asteroid hyalosis, 75 were males and 25 females. Ten patients had the condition in both eyes, 48 in the right eye only, and 42 in the left eye only. Male patients with asteroid hyalosis ranged in age from 42 to 83 years, with an average age of 64 years; while female patients, at the time of diagnosis, ranged from 41 to 75 years of age. The average age of the total group was 63 years.

Table
Comparison of Blood Glucose Values in
Patients With Asteroid Hyalosis and
a Matched Control Group

Blood Glucose mg/100 ml	Study Group (100 Patients)	Control Group (100 Patients)
<115	40%	38%
<120	28%	28%
<140	15%	12%

Discussion

Fagans⁶ considers a two-hour blood glucose level in excess of 120 mg/100 ml to be abnormal and to require a standard glucose tolerance test to probe for the presence of

diabetes mellitus. In our two groups, with an average age of 63 years, we found an identical incidence of 28% having a two- to five-hour postprandial blood glucose value in excess of 120 mg/100 ml.

A United States Public Health Service survey⁷ of 3,516 persons in a community gives the prevalence of diabetes as 2%. In contrast, Keller⁸ found abnormal results in 56% of 630 consecutive glucose tolerance tests performed in a hospital population in one laboratory during a 12-week period.

The commonly accepted standards of glucose tolerance normality come from studies of young adults, but it seems that performance on glucose tolerance testing declines with age. According to Andres,⁹ impaired tolerance for a glucose load is seen in about one-half of elderly persons, and in many of these the finding may well be a physiologic change related to aging and not necessarily a sign of diabetes mellitus with its implied derangements of carbohydrate, lipid, and protein metabolism. It has been shown that a high percentage of elevated blood glucose values is not limited to elderly hospital patients. West and others¹⁰ found that the two-hour postprandial blood glucose level was above 120 mg/100 ml in approximately one half of a group of pension applicants and elderly members of a social club. He also presented evidence that the blood glucose responses to postprandial tests are more constant than to standard oral glucose loads.

Using glucose tolerance testing, authors studying diabetes mellitus in patients with asteroid hyalosis found an incidence varying from 27%^{4,11} to 66%⁵. A recent paper by Luxenberg and Sime¹ is the only other study having an age-matched control group. These authors performed glucose tolerance tests on all subjects (average age about 70 years) and diagnosed diabetes mellitus in 41% of the patients with asteroid hyalosis, and in 45% of the controls. They concluded that there was no relationship between asteroid hyalosis and diabetes mellitus. Our study supports their findings. We confirm that there will be a high incidence of "abnormal" blood glucose values in an elderly population and that the presence of asteroid hyalosis, albeit a striking abnormality in the vitreous humor, does not

in itself warrant extensive evaluation for diabetes mellitus. It would appear that it is necessary to change either the estimates of the prevalence of diabetes mellitus or the blood glucose criterion for the diagnosis of that entity in the geriatric population.

Summary

There is a remarkably high but equal incidence of elevated blood glucose values in a group of 100 patients with asteroid hyalosis and a control group exactly matched according to sex and age.

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[Scurvy] prevails chiefly in cold northern countries, especially in low, damp situations near large marshes, or great quantities of stagnating water. Sedentary people, of a dull, melancholy disposition, are most subject to it. It proves often fatal to sailors on long voyages, particularly in ships that are not properly ventilated, have many people on board, or where cleanliness is neglected. - William Buchan: *Domestic Medicine*, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 278.

Public Health Legislation and Appropriations in North Carolina

A Historical Review

BENJAMIN M. DRAKE, M.D., M.P.H.

"The past is prologue."

It is always helpful, in thinking about the future, to take a look at what has gone before. In attempting to learn something about the legislative history of public health in North Carolina, I am indebted to such sources as *Public Health in North Carolina: A Guidebook for County Commissioners*,¹ by Mr. Roddy Ligon; *As I Recall*² and *A History of the North Carolina State Board of Health* by Dr. E. B. Washburn;³ and *Public Health Administration in North Carolina*, by MacIntosh and Kendrick.⁴

This last mentioned publication was the result of a study made by the Rockefeller Foundation and requested by Dr. Carl V. Reynolds, State Health Officer at that time. The two by Dr. Washburn are factual accounts of (1) work in North Carolina by the "Sanitary Commission" and later the Rockefeller Foundation, in a state-wide study of hookworm infestation, with references to Dr. Washburn's service as health officer in two counties and later as Director of the Division of Local Health Administration of the State Board of Health; and (2) a study and report of the historical development of public health in North Carolina up to 1925.

The study by Mr. Ligon was prepared at the Institute of Government for the various Boards of County Commissioners throughout the state.

Legislation

According to these sources, the first legislation pertaining to the prevention of disease was entitled, "An Act for the More Effectual Prevention of the Spread of Contagious Distempers." This bill was enacted in 1712 and was a maritime quarantine act.

Health legislation from this date until 1877 was apparently sparse and designed primarily to deal with specific threats to the public health.

In 1877 a law was enacted which designated the entire Medical Society as a State Board of Health, and the sum of \$100 was appropriated for its expenses. This rather unwieldy situation was changed in 1879 when provision was made for a nine-member board, with six appointments to be made by the Governor and three by the Medical Society. (This was later changed to the present proportion — five appointments by the Governor and four by the Medical Society.) At the same time, provision was made for the creation of local boards of health to be composed of all regular practicing physicians in the county, the chairman of the Board of Commissioners, the mayor of the county seat, and the county surveyor.

In 1901 the General Assembly abolished county boards of health and established county sanitary committees having definite duties and powers, but this was changed by the 1911 legislature. In this year the organization of the county boards of health was changed to essentially its present form: ex-officio members—chairman, Board of Commissioners, mayor of county seat, superintendent of schools; and one physician, one dentist, one pharmacist, and one public-spirited citizen, who are appointed by the ex-officio members. As a result, the first county health department in the state was established in Guilford County on June 1, 1911.

In 1911 the first compulsory immunization law was enacted, requiring certain persons to be vaccinated against smallpox.

These and other early advances in public health in the state have been largely attributed to the successful efforts of the Rockefeller Sanitary Commission in its educational campaign for eradication of hookworm and other diseases caused by "soil pollution." According to Dr. Washburn, campaigns were conducted in all counties of the state, with all but one making a small appropriation to the campaign.

During these earliest years of public health, financial support was minimal. For actual protection of health and prevention of disease, the primary expenditure of funds was made by the Rockefeller Sanitary Commission with small appropriations (\$200) from the counties. Legislative support, as at present, was "spotty"; however, gradual increases in funds, first for support of the state organization and later to provide incentives for the formation of local departments, were made available. Most of the appropriations were specifically made to combat some endemic or epidemic disease, such as typhoid fever, smallpox, tuberculosis and malaria. The continuing presence or threat of these diseases was sufficient to justify efforts on a local basis, so that there was a gradual increase in the number of local health departments with full-time physicians and other personnel being employed. By 1920 there were 23 counties involved in the effort; however, the state was not completely covered until 1949.

In 1913 the first vital statistics law was enacted, and within a few years the state was made a part of the national registration system for births and deaths.

During this period, county boards of health responsibilities were generally similar to those enumerated in the present law, in that they had (1) "immediate care and responsibility for the health interests of the county," and (2) the authority to "make rules and regulation for the protection and advancement of the public health and to adopt additional rules and regulation to those of the State Board of Health pertaining to the control of communicable diseases"; (3) to elect either a county physician or a county health officer biennially (or in lieu of the latter, a county quarantine officer) subject to standards established by the State Board of Health for counties or districts receiving state aid; (4) to pay the fees and salaries subject to the approval of the county commissioners; and (5) to exercise certain minor judicial functions.

In 1927 (revised in 1955) the General Assembly enacted the "County Fiscal Control Act," which sets forth the manner in which public funds may be utilized. This law spells out procedures for budget preparation,

approval and use of funds. As such, it serves to protect the Board of Commissioners as well as the Board of Health and its executive officer. Although at times it may appear to present obstacles to the effective, efficient functioning of a health department, it has served the very laudable end of insuring the wise use of taxes collected by the counties. While there is a limitation imposed by the law on taxes levied for general purposes, there is no limit on the amount that may be levied for the protection of the public health. This is determined primarily by the willingness of the various boards to levy additional taxes for this purpose, and generally this willingness is guided by popular demand, by demonstrated need, and by the overall financial conditions prevailing in the county. In addition, a special levy for health, if needed, may be voted by the residents of the counties.

In 1939 diphtheria immunization was made compulsory.

In 1941 the General Assembly enacted another law which, while not directed to public health alone, had, and continues to have, a profound effect. This was the establishment of the Merit System (later changed to the Personnel Department). The provisions of this law are relative to the employment, classification, pay, and discharging of personnel in state and county agencies participating in certain federal funds. Classifications refer to certain positions which are grouped according to duties, supervision required, and performed with requirements of training, experience and other qualifications. Job titles, description of duties, etc., were established for each class of positions. All budgeted positions in local health departments must fit into the classification plan. Salary ranges were established for each class of position, with minimum and maximum salaries to be paid. Under exceptional conditions counties may be allowed to adjust the rates downward. Examinations are conducted for those desiring employment and registers set up for departments needing personnel.

A number of important problems were solved by the passage of this law. Prior to the federal requirement, many local (and state) agencies were subject to local political interference. Tenure, for example, was

uncertain. A change in the Board of Commissioners could result in persons being discharged as a result of political activity, because someone had been forced to comply with a law or regulation, or simply because a politician desired a job for a relative or supporter. Additionally, some counties, justly or unjustly, did not feel the need for paying equitable salaries, or some county departments where political appointees demanded and got favored treatment.

The clause of the law forbidding partisan political activity has been especially beneficial in that no longer can departmental employees be required to make political contributions.

In addition, employees enjoy the right of appeal in case of dismissal, demotion, or suspension.

While it may seem at times that the above law and the regulations promulgated by the Personnel Board are unreasonable and unwieldy, in general the effect of the law has been beneficial to administrators, to personnel and to public health in the state.

In 1945 immunization against pertussis was made a requirement for admission to school. This same legislature passed a permissive law establishing the Local Governmental Employees' Retirement System, which has been revised from time to time until at present it is equal to or better than many industrial retirement systems.

From the time these laws were enacted until the passage of the Medical Examiner Act in 1955, no major public health legislation was enacted. However, in 1957 there was a re-writing and re-codification of all public health laws of the state. The more important aspects of the old laws were preserved, while those portions which were obsolete were deleted. Added to the laws was a section that gave the health director the power of injunction. While this is not generally used, it adds an important means of obtaining rapid correction of a condition that could adversely affect the health of his constituency. Also in 1957 vaccination against poliomyelitis was made compulsory.

In 1963 the General Assembly divorced physical health from mental health by transferring all mental health activities from the Board of Health to a new Department of

Mental Health and providing for the appointment of local mental health authorities who would be responsible for the mental health programs in this area.

In 1967 a similar action removed the responsibility for the control of air pollution from the State Board of Health to a new Department of Air and Water Resources. However, local health departments were permitted to continue existing programs so long as they complied with standards set by the Board.

The 1967 Legislature also revised the Medical Examiner Act and enacted legislation empowering the boards of commissioners to establish or franchise ambulance services with their counties.

In 1969 the law concerning the Board of Air and Water Resources was revised, giving the local boards of commissioners power to appoint an air pollution control authority and to designate an agency for the purpose of controlling air pollution. Also an act was passed which allows the boards of commissioners to enact ordinances governing the general well-being of the counties.

Passage by the Congress of the Comprehensive Health Planning Act and the Medicare and Medicaid laws in recent years have wide implications in public health, and it will be interesting to observe the results.

It is of interest to note the great concern by the medical profession in the earlier days of public health. Organized medicine was an effective lobbying agent in obtaining passage of 1877 and 1879 acts and in obtaining provision for the appointment of Dr. Rankin as full-time State Health Officer. Similarly, in the formation of county health departments the profession was a prime mover in obtaining appropriations for public health work. Down through the years, interested, dedicated physicians have sponsored and lobbied for improvements in methods and provision of funds for the operation of health departments. We should, when hearing criticism of the profession, recall these facts and be aware of the continued backing of the (sometimes silent) majority of medical men and eternally grateful to them for their efforts in behalf of improved health for the people of this state.

Appropriations

Adequate funds for the operation of public health programs have been difficult to obtain. There was a meager allocation of \$100 in 1877 for the operation of the State Board of Health. In 1879 an appropriation of \$200 was made to carry out a great increase in assigned duties both in the state and in counties. This was apparently the first allocation of funds involving local public health work.

It is of interest to note that in 1879 Dr. Thomas F. Wood, the first State Health Officer, spent \$431 of his own money to supplement funds allocated by the legislature. In 1855 the total appropriation to the State Board of Health was increased to \$2,000 plus \$250 for printing. In 1893 the salary of the State Health Officer was increased to \$1000, and there was an emergency fund for epidemic control of \$2,500. Together with the modest increase in funds, there was a great increase in duties and responsibilities of those concerned.

In 1909 when Dr. W. S. Rankin was made the first full-time State Health Officer, the appropriation was increased to \$10,500 and \$2,000 was appropriated to establish the State Laboratory of Hygiene.

The first of the local appropriations for public health was apparently made in Guilford County in 1911, when a sum of \$2,500 and the part-time use of a horse (to be shared with the fire chief) was appropriated. Other departments were organized prior to 1913, and funds probably were allocated by the commissioners with very little, if any, aid from the state. In 1913 physicians assigned to the state by the Rockefeller Sanitary Commission succeeded in obtaining allocations of \$200 to \$300 from 99 of the counties to aid in the detection and treatment of hookworm infestation.

By 1915 the annual appropriation to the State Board of Health had been increased to \$40,500 and the General Assembly of this year allocated \$50,500 for 1915 and \$55,500 for 1916, plus \$15,000 for the State Laboratory.

In 1917 the "Bureau of County Health Work" was established, and \$15,000 annually was appropriated for distribution to the ten counties then cooperating with the state in public health efforts. It was understood that

for the first year the county would match these funds equally; the second year, 60% county; and the third year, 75% from local sources. In 1919 the amount was increased to \$27,500 per year. In addition to direct subsidies, assistance in the form of nursing and other services was provided by what is now the Personal Health Division; allocation for correction of defects in school children and other direct services were made available to counties.

From 1919 until 1938 I have not been able to find records of legislative and local appropriations, but the assumption is that there was some increase in the former and a considerable increase in county funds. In addition, federal funds were allocated to the various states, first by the Children's Bureau and then by the Public Health Service. While some of the money was to be used in the general program, some was in the form of categorical grants for specific programs. Portions of these grants were allocated by the state to the participating counties. In or shortly after 1936 the Reynolds Foundation made a grant of \$100,000 (later \$150,000) per year for ten years to be used to establish "a militant venereal disease campaign" in the state. These funds were allocated to certain counties and were used for the stated purpose. In 1938 the total amount of money available for local health work in the state was \$1,188,991. Of this, \$100,949 represented state support, \$323,851 came from federal sources, and the balance of \$764,191 was appropriated locally.

By 1944-1945 the state allocation was increased to \$150,000, the federal to \$722,297, and local to \$1,380,717,

We are all familiar with the picture since 1944 as graphically depicted in the current issue of the Community Health Division's "Local Health Service Budget and Other Pertinent Information."⁵

Of interest is the statement that local funds increased 333%, state funds 76%, and federal funds decreased 77.3% between 1949-1950 and 1968-1969.

The increase in all funds for local health work from 1944-1945 to 1968-1969 has been from \$2,253,015 to \$13,809,871.

Not included in the above figures are special grants such as federal funds allocated

Table 1

Source of Funds (Even Dollars)

Fiscal Year	Local Appropriation	State Allotment	Federal	Total
1944-45	\$ 1,380,717	\$ 150,000	\$ 722,297	\$ 2,253,015
1945-46	1,517,013	175,000	699,139	2,391,152
1947-48	2,125,385	350,000	565,194	3,040,579
1948-49	2,467,860	350,000	575,531	3,393,391
1949-50	2,693,246	1,150,000	529,383	4,372,629
1950-51	2,964,175	1,132,000	547,344	4,643,519
1951-52	3,252,812	1,132,000	575,276	4,960,088
1952-53	3,508,547	1,132,000	577,117	5,217,665
1953-54	3,873,002	1,132,000	296,110	5,301,112
1954-55	4,195,463	1,132,000	295,800	5,623,263
1955-56	4,587,874	1,210,000	280,378	6,078,252
1956-57	4,896,286	1,142,000	280,306	6,618,592
1957-58	5,334,965	1,277,000	293,820	6,905,785
1958-59	5,619,843	1,277,000	458,639	7,753,210
1959-60	6,157,105	1,277,000	319,105	7,753,210
1960-61	6,650,171	1,277,000	281,754	9,066,144
1961-62	7,82,067	1,702,323	281,754	9,066,144
1962-63	7,704,168	1,823,969	217,461	9,745,598
1963-64	7,610,791	1,527,268	200,000	9,388,059
1964-65	8,026,994	1,563,976	200,000	9,790,970
1965-66	8,870,229	1,596,400	120,000	11,293,672
1966-67	9,544,848	1,628,824	120,000	11,293,672
1967-68	10,497,061	2,028,824	120,000	12,645,885
1968-69	\$11,661,047	\$2,028,824	\$120,000	\$13,809,871

for air pollution control, home health services, special planned parenthood, and maternal/child health grants. The addition of these would likely increase the above by over half a million dollars.

Conclusion

It is evident from the foregoing review that (1) primary efforts in behalf of public health in North Carolina were initially directed at specific disease conditions and epidemic; (2) growth of the work has been gradual but steady; (3) legislation, in general, has been sound; (4) financial support has come overwhelmingly from local sources; and (5)

North Carolina has, in general, a locally owned and operated system of public health that has, in the main, proved effective in the preservation of public health in the state.

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WHAT'S NEW?

"A new and in many respects a noble
conception of medicine has been developed.
Formerly medical practice was almost
exclusively a personal service to the sick
individual, and measures looking toward the
general relief of disease and its prevention
received scanty consideration. The idea of a
wider service to the city, to the state, to the
nation, to humanity rather than personal
service to the individual, is becoming
dominant in medicine. . . . The idea of
public service and of returning to the people
in an effective way some of the results of
their labor also underlies the large donations
which have been given for the creation of

special laboratories and institutes in which,
through research, greater knowledge of
disease may be obtained and made available."

The above, but for its lack of obscenities
and mild tone, might be mistaken for a
pronouncement in a publication of the
medical new left. In fact, it comes from
"Disease and Its Cause," a little volume in a
series called "The Home University of Modern
Knowledge," published in hard covers, for 50
cents, back in 1911, and written by the
distinguished Harvard pathology professor, W.
T. Councilman, whose name otherwise
attaches to a type of hyaline cytoplasmic
inclusion in liver cells seen in yellow fever.
Reading it reminds one of the Biblical
observation that there is nothing new under
the sun, and makes one get weary with the
anti-intellectual position of our current noisy
"reformers," who are really more in the way
of anarchists and nihilists. While quite willing
to tear anything and everything down, in a
spirit of indignation and sport in about equal
parts, they thus far have issued no interesting
proposals for better alternatives.

The profession has long sought ways to be
of help beyond that offered to individuals.
Such extension requires the cooperation of all
sorts of people, physicians being only one
group among them. Money, general
upgrading of the economy and the
environment, all are tied together as
significant factors in improving population
health. If the pace at which the health of the
people advances is not satisfactory, is it
because the medical profession has had to
wait for confrontationists to grab the
microphone at medical meetings and tell us
about it? Or is it that society is extremely
complex, that health problems are all of a
piece with other facets of the lives of the
many sorts of people present in our diverse
society, and that only time will see a gradual
upward trend in the state of the nation's
health?

The latest news from the AMA executive
vice-president's office is that a publication
called *Street Medicine—Chicago Style* has
warned of planned demonstrations at the
June meeting, calling for massive reparations
from the profession for crimes against the
people. Apparently these zealots plan to be as
impolite in collecting their bill for services
not rendered as they are in general. It's a

shame that their pursuit of power has not allowed them more time to read. If it had, they might at once learn from people like Dr. Councilman that medicine has had long involvement with the same things for which they profess concern, and that Machiavelli made points other than the ones of which they seem to be aware. Those of us who were born in the twenties or earlier have seen their like before, in newsreels from Germany and Italy in the thirties, and perhaps there are enough of us left alive and in positions of influence to keep the totalitarians of the sixties and seventies, from making it "happen here." They wouldn't like to have their messianic visions compared to those of Hitler and his like, but to some of us the parallels are horrendously numerous.

* * *

THE HAIR SPRAY PAPER

To an editor who studied mechanical engineering the paper by Drs. Welton and Norem brings a special pleasure. While they may be telling our physician readers more than they want to know about what hair spray does to hair, they do so in an elegant way, and one which will be of interest to the wider audience the Journal reaches when its contents are noised abroad through Index Medicus. Even those of our readers with an active disinterest in hair spray effects will be glad to know that the University brand at Charlotte has been collaborating with one of

our members in active private practice. The equipment of Dr. Norem's laboratory would probably not be available in any medical facility, and modifications needed to work with material like human hair were provided with grant funds, and will remain as an asset to the education of engineering students. Those same students worked on the project under Dr. Norem's direction, and will be finishing engineering studies with a little more insight into biologic problems than would ordinarily occur. With increasing cooperative work between engineers and physicians all over the country, we can add another example of our own in Charlotte.

Despite the statements above about a limited interest on the part of our local readership in the subject of the paper, there is evidence in the text that puts all of us on notice about the magnitude of hair spray use. In the calendar year 1969 the paper notes that 500 million cans of hair spray were produced. With about 100 million females available to use it, this is only 5 cans per female, and usage will surely go up unless the hippie way of life spreads more widely than seems likely. And to judge from TV ads men are using the stuff too, which might be understandable if you want to ride a motorcycle wearing current long hair styles and dismount looking halfway decent (or indecent, as you will). As soon as we see hair spray ads during time outs on telecast ball games we'll really know the problem has become acute, and will have to reread the paper of Drs. Welton and Norem.

A discharge of blood from the haemorrhoidal vessels is called the bleeding piles. When the vessels only swell, and discharge no blood, but are exceeding painful, the disease is called the blind piles. -William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p. 242.

Correspondence

THE NICHE FOR A PHYSICIAN'S ASSISTANT

To the Editor:

Occasionally those of us at the periphery may obtain a better panoramic view than those at the hub. The Duke and Bowman Gray Physician's Assistant programs have been endorsed by the Executive Council of the Medical Society of the State of North Carolina and will be supervised by our N. C. Board of Medical Examiners. It is our understanding that the University of North Carolina Medical Center is now contemplating another well-supervised program. Therefore, the development of these Physician's Assistants in our state is indeed commendable. They know their limitations as they do their qualifications. In our practice (which consists of over 11,000 families in our active files for two physicians), the P.A.'s have proven good on taking and dictating histories, suturing minor lacerations and assisting with physical exams on males, children, and infants. Of course, they do not prescribe. They have been carefully screened, are clean-cut, and perform many additional jobs in laboratory work, the taking of blood samples, changing dressings, and follow-up visits to hospitalized patients. Also, they are efficient in pulmonary and inhalation therapy techniques. They maintain the line between diagnosing and treating on the one hand and helping to do those things on the other—the fine line between physician and physician's assistant. Our experience with the Duke P.A. program leaves us well pleased.

There are 20 physician's assistant programs in various stages of development in this country. Some are good, some bad. It is assumed in the early stages that the N. C. Board of Medical Examiners will approve only graduates of schools with acceptable curricula. Others without academic credentials might at a later date be investigated closely with respect to their qualification and abilities, and placed in categories commensurate with their competency.

The burden of meeting the medical care needs today is greatly accentuated by Medicare and Medicaid. The government only pays for these services. It does not donate or deliver medical requirements. Unfortunately, we are governed by laws which promise too much and by budgets which contribute too little. Our only method to deal with this dilemma is to do so directly—by reducing the anticipation in line with reality.

There has been a decline of 10% away from patient care from 1950 to 1965 because one third of all physicians now devote themselves to industry, public health and other institutions, teaching, or as hospital administrators. North Carolina ranks 10th or 11th from the bottom in physicians per 100,000 population; but in Eastern North Carolina there are less doctors for our people than anywhere in the United States, except Alaska. Even if the supply could be increased more rapidly than now seems possible, it wouldn't help much. We must improve the system and the entire medical complex must join in the drive for change in health care delivery.

An innovative effort by the medical profession to increase health care manpower in North Carolina is through our Medical Society's leadership in the new Physician's Assistant program. Only by unselfish, capable, and courageous leadership will this country escape the far less competent who are striving for acceptance, leadership, and authority in the care of human ills.

ERNEST W. FERGUSON, M.D.
Plymouth

Medicare benefits paid through North Carolina Blue Cross and Blue Shield, Inc., increased 30% in 1969 and totaled \$76.9 million for the year, according to J. A. McMahon, president.

On June 30, North Carolina Blue Cross and Blue Shield, Inc., with home offices in Durham and Chapel Hill, will complete four years of service as fiscal intermediary to receive and pay bills under Part A of the Medicare program.

Blue Cross and Blue Shield administers Part A, which pays hospital bills for senior citizens. Part B, covering doctor bills, is handled by a commercial carrier.

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
FEBRUARY 1970 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries Mar. 1969 - Feb. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Mar. 1969 - Feb. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths			Total Deliveries Mar. 1969 - Feb. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Mar. 1969 - Feb. 1970	Perinatal Rate Per 1,000 Deliveries				
	February 1970	March 1969 - February 1970			February 1970	March 1969 - February 1970			February 1970	March 1969 - February 1970				February 1970	March 1969 - February 1970						
NORTH CAROLINA	140	1894	67175	27.9	107	1355	28387	47.7													
ALAMANCE		26	1318	19.7	1	27	450	60.0	PENDER	1	6	123	48.6		6	141	42.6				
ALEXANDER	2	16	336	47.6			35	-	PERQUIMANS			70	-		2	48	-				
ALLEGHANY		2	142	-			6	-	PERSON		8	278	28.8	1	10	194	61.5				
ANSON		3	152	-	2	20	295	67.8	PITT	4	21	749	28.0	3	38	684	55.6				
ASHE	1	8	326	24.5			1	-	POLK		2	115	-		3	36	-				
AVERY	2	12	231	51.9			2	-	RANDOLPH	1	34	1270	26.8	1	5	137	36.5				
BEAUFORT	1	9	388	23.2	2	11	262	42.0	RICHMOND	2	20	475	42.1	2	15	288	52.1				
BERTIE		7	94	-		15	253	59.3	ROBESON		21	550	38.2	2	56	1448	38.7				
BLADEN		3	234	-		8	218	36.7	ROCKINGHAM	1	31	970	32.0	4	19	414	45.9				
BRUNSWICK	1	9	261	34.5	1	6	152	39.5	ROWAN	6	33	1176	28.1	1	16	311	51.4				
BUNCOMBE	6	59	2097	28.1	13	278	46.8	-	RUTHERFORD		16	739	21.7	1	9	148	60.8				
BURKE	2	28	958	29.2	2	91	-	-	SAMPSON	1	12	409	29.3	2	25	337	74.2				
CABARRUS	30	1044	28.7	-	14	279	50.2	-	SCOTLAND		12	294	40.8	1	11	282	39.0				
CALDWELL	41	1118	36.7	-	1	8	101	79.2	STANLY		18	584	30.8		2	134	-				
CAMDEN	2	52	-	-	1	37	-	-	STOKES	1	11	318	34.6		1	42	-				
CARTERET	1	19	520	36.5	2	71	-	-	SURRY	1	32	914	35.0		5	63	-				
CASWELL		2	143	-	1	13	182	71.4	SWAIN	1	3	93	-			69	-				
CATAWBA	7	48	1514	31.7	8	226	35.4	-	TRANSYLVANIA	2	14	296	47.3	1	2	25	-				
CHATHAM	1	3	318	-	1	9	180	50.0	TYRRELL			29	-		2	31	-				
CHEROKEE		6	295	20.3	1	10	-	-	UNION	2	20	705	28.4	1	9	288	37.3				
CHOWAN		1	89	-	2	67	-	-	VANCE		5	323	15.5		24	378	63.5				
CLAY	1	6	91	-	1		1	-	WAKE	4	62	3084	20.1	10	62	1176	52.7				
CLEVELAND	1	27	986	27.4	1	22	434	50.7	WARREN		2	51	-	1	6	156	38.5				
COLUMBUS		11	490	22.4	20	333	60.1	-	WASHINGTON		4	136	-	1	10	151	66.2				
CRAVEN	2	34	1180	28.8	2	16	376	42.6	WATAUGA		12	571	32.3			4	-				
CUMBERLAND	12	112	3828	29.3	3	62	1402	44.2	WAYNE	5	25	1141	21.9	3	39	571	68.3				
CURRITUCK			60	-		1	31	-	WILKES	4	29	844	34.4			57	-				
DARE		3	109	-			9	-	WILSON		20	935	37.4	4	23	581	39.6				
DAVIDSON	1	50	1456	34.3	1	13	255	51.0	YADKIN		5	366	13.7		2	36	-				
DAVIE		5	272	18.4	1	4	66	-	YANCEY		5	201	24.9			6	-				
DUPLIN	3	10	395	25.3		14	306	45.8	CITIES												
DURHAM	3	31	1468	21.1	4	43	979	43.9	City totals are also included in county totals												
EDGECOMBE		9	415	21.7		21	553	38.0	ALBEMARLE	2	1	134	-		1	43	-				
FORSYTH	7	68	2771	31.8	2	56	1144	49.0	ASHEVILLE		20	705	28.4		11	235	46.8				
FRANKLIN		6	183	32.8		12	262	45.8	BURLINGTON		11	585	18.8		10	139	71.9				
GASTON	8	65	2523	25.8	6	34	486	70.0	CHAPEL HILL		6	323	18.6		1	4	53	-			
GATES	1	2	46	-		5	90	-	CHARLOTTE	5	74	3120	23.7		7	85	1995	42.6			
GRAHAM		1	109	-			15	-	CONCORD		8	205	39.0		9	108	83.3				
GRANVILLE	7	237	29.5	-	1	13	371	35.0	DURHAM	2	20	936	27.4	4	41	856	47.9				
GREENE	4	104	-	-	2	7	147	47.6	ECON	1	4	217	-		2	63	-				
GUILFORD	6	99	3893	25.4	10	81	1605	50.5	ELIZABETH CITY		2	155	-		3	95	-				
HALIFAX		10	405	24.7	4	28	582	48.1	FAYETTEVILLE	4	36	989	38.4	1	34	607	56.0				
HARNETT	2	19	548	34.7	1	15	325	46.2	GASTONIA	3	23	831	27.7	3	13	210	61.9				
HAYWOOD	4	26	679	38.3		1	17	-	GOLOSBOBO	4	10	335	29.9		18	247	72.9				
HENDERSON	1	22	671	32.8		2	51	-	GREENSBORO	1	46	1832	25.1	7	50	934	53.5				
HERTFORD		9	130	68.2	1	18	263	68.4	GREENVILLE		8	324	1.7	3	11	208	52.9				
HOKE	1	3	108	-		3	235	-	HENDERSON		3	127	-		10	146	68.5				
HYDE		2	37	-		4	36	-	HICKORY	2	14	375	37.3		4	102	-				
IREDELL	1	27	958	28.2	1	18	331	54.4	HIGH POINT	1	24	843	28.5	3	19	451	42.1				
JACKSON	1	5	290	17.2		1	64	-	JACKSONVILLE		10	424	23.6	1	4	68	-				
JOHNSTON		23	748	30.7	2	18	331	54.4	KINSTON		4	300	-		4	229	-				
JONES		1	77	-		1	73	-	LENOIR		6	212	28.3		4	54	-				
LEE	1	5	398	12.6		5	169	29.6	LEXINGTON		10	261	38.3		4	87	-				
LENOIR	1	12	598	20.1	1	13	428	30.4	LUMBERTON		3	185	-		9	195	46.2				
LINCOLN	12	548	21.9	-		5	93	-	MONROE	1	6	130	46.2	1	6	77	-				
MCOWELL	3	24	534	44.9		3	44	-	NEW BERN		5	164	30.5		6	122	49.2				
MACON	1	6	219	27.4		1	8	-	RALEIGH	2	34	1639	20.7	6	38	599	63.4				
MADISON		8	224	35.7			1	-	REIDSVILLE		3	176	-	2	5	102	49.0				
MARTIN	6	197	30.5	-	16	260	61.5	-	ROANAKE RAPIDS		6	184	32.6		3	40	-				
MECKLENBURG	7	120	4768	25.2	9	99	2322	42.6	ROCKY MOUNT E		2	109	23.1		7	150	57.4				
MITCHELL		5	195	25.6			3	-	ROCKY MOUNT N	1	6	238	-		7	94	-				
MONTGOMERY		7	256	27.3		9	110	81.8	SALISBURY	2	5	212	23.6		6	142	42.3				
MOORE	1	24	464	51.7	1	9	240	37.5	SANFORD		3	181	-		2	71	-				
NASH	2	11	558	19.7	1	29	518	56.0	SHELBY		5	183	27.3	1	6	126	47.6				
NEW HANOVER	4	26	1215	21.4		18	384	48.9	STATESVILLE	1	11	277	39.7		8	144	55.6				
NORTHAMPTON		1	105	-		11	291	37.8	THUMASVILLE		9	185	48.6		6	99	-				
ONSLow	4	65	2179	29.8	4	23	433	53.1	WILMINGTON	3	15	571	26.3		12	321	37.4				
ORANGE		19	839	22.6	1	10	228	43.9	WILSON		10	288	34.7	1	9	266	33.8				
PAMLICO		3	83	-		3	57	-	WINSTON SALEM	3	54	1462	36.3	1	52	1083	48.0				
PASQUOTANK		6	289	20.8		6	173	34.7													

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

Committees & Organizations

MENTAL HEALTH SERVICES FOR CHILDREN

I have been asked to meet with you today and to state in broad general terms the attitude of the State Medical Society toward the problem of the emotionally disturbed child, to comment on the resources currently available in the state for dealing with the problem, to make suggestions for filling unmet needs, and to add any other pertinent comments.

The two committees of our Society which would be most closely involved with the work of this Commission are the Committee on Child Health and the Committee on Mental Health, especially the Subcommittee on Mental Retardation and Children Services of the latter. In response to your request for a detailed statement of our position, these two committees will formulate a joint statement, subject to review by the Executive Council of the State Society at the May meeting.

In 1965 the State Medical Society devoted considerable attention to the entire problem of mental health services for children and, in collaboration with the North Carolina Mental Health Association, adopted a rather detailed policy statement. From a rereading of this report, now almost five years old, it is apparent that North Carolina has made considerable progress in the intervening period.

Many services and facilities which did not exist in 1965 have now become a reality. It is apparent to the practicing physician, however, that not nearly all our needs have been met. The new knowledge that has come into existence since 1965 in itself creates a demand for new services, new facilities, and new planning. In other words, there is now available knowledge which was not available previously and which, if implemented, would enable us to aid some children not receiving help now. Some of the long range plans that we saw in the far distant future in 1965 have only now begun to materialize and bear fruit. For example, our planned network of

comprehensive mental health centers across the state, though not a present reality, seems to be getting closer every day. Apparent to all of us is our desperate need for adequate mental health services, and our desire for instant action to relieve the manpower shortage. I do believe that this problem is gradually being solved, and that adequate staffing for more and more of these comprehensive centers is becoming available.

From the standpoint of the practicing physician, who often is the first person whom the parents of an emotionally disturbed child turn to in their time of need, we would like to register appreciation for the services that are offered by the various state agencies and educational institutions. At the same time we want to express our continuing concern about the lack of coordination and the fragmentation of services. Every practicing physician should have at his fingertips specific knowledge of each agency—its scope of services, its limitations, operational procedures, and the alternative mechanisms available through other agencies. Usually this is not the case. The average physician, when faced with the problem of an emotionally disturbed child, is relatively uncertain as to where to refer the problem, when to refer it, or how to overcome the difficulty of making appointments at an appropriate facility and getting the child there when a considerable distance is involved.

Furthermore, we understand from specialists in the field that it is difficult, if not impossible, to determine whether a very young child who appears to be emotionally disturbed is in fact suffering from an emotional illness or some type of neurologic, medical, or organic disease of the central nervous system which might more appropriately be treated by the pediatrician, family practitioner, or neurologist than by the psychiatrist. It would seem to us that facilities for children in this very young age group should be under the joint purview of both the State Board of Health and the Department of Mental Health, since in so many cases it is difficult to determine in which category the child's illness belongs.

We also hope that this Commission will direct some of its attention to the prevention

Read before the Study Commission for Emotionally Disturbed Children in North Carolina, Raleigh, March 27, 1970.

of emotional disorders in childhood. We believe that such efforts should precede the conception of the child, and perhaps even the marriage of the parents. We believe that a well designed and well executed program of premartial counseling might in itself make for smoother, happier, more lasting marriages, which would, in turn, be reflected in fewer emotionally disturbed children.

We are also concerned that every woman in North Carolina receive adequate prenatal care as a means of preventing mental defects which might also lead to emotional illness. We would encourage the further development of the nurse-type screening clinics under the auspices of local health departments, and we suggest that more attention be given to types of emotional illness that respond readily to therapy.

I want to assure you of our interest in the activities and deliberations of this Commission, and as members of the State Medical Society, we are prepared to assist you by any means at our command, in order that you may make meaningful and intelligent recommendations of the Governor and the 1971 General Assembly.

EDGAR T. BEDDINGFIELD, JR.

COMMITTEE ON MEDICARE

At a recent meeting of the Medicare Committee of the State Medical Society, a number of matters were discussed regarding Part B of the Medicare program.

Dr. A. J. Dickerson, chairman of the Insurance Industry Committee, confirmed that the Claims Review Service of his committee will continue to adjudicate contested settlements, including those in which the attending physician took an assignment.

With regard to professional services rendered under Part B; the following procedures are in order:

1. Should the physician have a question regarding a charge adjustment or reduction in allowance of claim, he should first contact Mr. Brantley Shaw, Prudential Insurance Co., High Point. Telephone number: Area Code 919-885-8171. Ext. 225. If the physician

does not receive satisfaction with this approach, then he has the choice of presenting his case to the Claims Review Service of the Insurance Industry Committee, Dr. A. J. Dickerson, 1600 North Main Street, Waynesville, N. C. 28786. Telephone number: Area Code 704-456-3301.

2. If a physician has a complaint in regard to policy or procedure of the Medicare Program, then his complaint should be

Bulletin Board

NEW MEMBERS OF THE STATE SOCIETY

Sidney Henry Westbrook, Jr., M.D., I, 16 Staff Circle Hospital, Morganton, 28655.

Louis Pikula, Jr., M.D., NS, 701 Quarterstaff Rd., Winston-Salem, 27104.

Richard Elbert Akers, M.D., U, 624 Quaker Lane, High Point, 27602.

Olson Huff, M.D., Pd, 1524 Harding Place, Charlotte, 28204.

Eugene Vincent Maynard, M.D., Dorothea Dix Hospital, Raleigh, 27602 (Intern Resident)

Bernard Leonard Coniglio, Jr., M.D., I, 811 Rockford St., Mt. Airy, 27030.

William Markley McKinney, M.D., N, 3421 Pennington Lane, Winston-Salem, 27106.

Leland E. Powers, M.D., 2516 Woodberry Dr., Winston-Salem, 27106

Robert Morris Martin, Jr., M.D., p, 217 Riverdale Dr., Durham, 27705.

Dee Campbell Breeden, M.D., Pd, 418 King St., Laurinburg, 28352.

John Robert Cella, M.D., R, 3344 Granville Dr., Raleigh, 27609.

James Morris Croft, M.D., GP (Renewal) Box 843, Morganton, 28655.

Richard Bailey, M.D., Oph, 205 W. 29th St., Lumberton, 28358.

Stanleigh Edward Jenkins, Jr., M.D., GP, Rt. 1, Box 8F, Ahsoskie, 27910.

Robert Kilgo Creighton, M.D., OBG, 2428 Doctors Circle, Wilmington, 28401.

R. L. May, M.D., Pd, 118 Vance St., Hamlet, 28345.

Laura Ross Venning, M.D., Pd, 1200 Blythe Blvd., Charlotte, 28204.

Edwin Thornton Preston, M.D., Or, 309 Birch Circle, Chapel Hill 27514.

Keeling Alfred Warburton, M.D., OBG, 318 Westwood Ave., High Point 27262.

John Perley Stratton, M.D., I, Croasdaile Clinic, Durham, 27705.

Oliver Aiken Mays, M.D., PH, 609 Gloucester Rd., Goldsboro, 27530.

Earl Elliott Fisher, Jr., M.D., Pd, 1700 S. Tarboro St., Wilson 27893.

Harold Roger Imbus, M.D., 820 Pebble Drive, Greensboro, 27410.

Evan H. Ashby, Jr., M.D., Faculty Apartments, Boone 28605.

Glenda Faye Hartness Weber, M.D., 431 McLean Avenue, Winston-Salem, 27107.

Ralph Herman Massengill, Jr., M.D., P, 4343 Lassiter Mill Rd., Raleigh, 27609.

Jereliss Anjou Nannette Payne German, M.D., 2502 Druid Hills Dr., Winston-Salem, 27103.

Paul Marshall James, Jr., M.D., Bowman Gray School of Medicine, Winston-Salem, 27103.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

The Bowman Gray School of Medicine and North Carolina Baptist Hospital dedicated three new educational facilities in ceremonies March 21 at the medical center.

The buildings are the Hanes Building, a major addition to the medical school; the 400-seat Charles H. Babcock Auditorium; and the School of Nursing and Allied Health Programs Building.

Dr. John A. D. Cooper, president of the Association of American Medical Colleges, delivered the dedicatory address. He said that through its building program the medical center is helping to solve one of the major health problems of the decade—the critical shortage of health manpower.

These facilities have permitted a sizeable increase in the enrollment of students. In 1969 the medical school accepted 76 first-year students, about 20 more than the average size of the entering class during the previous 10 years. By 1972 the total enrollment of medical students will be 300.

The Division of Allied Health Programs also has increased enrollment and has developed programs to train a new category of health workers—physician's assistants—who could serve to increase the physician's productivity.

New facilities also have enabled the medical school to adopt a new curriculum, designed to better prepare today's students for the practice of tomorrow's medicine.

Dr. Cooper said that more medical workers must be trained and, at the same time, the medical profession must be concerned with the health services being provided. The health field has "challenges to increase the quantity, quality and equality of health care, and challenges to bring the promise of medicine and medical science to all segments of society," he said.

Dr. Quentin N. Myrvik, professor and chairman of the Department of Microbiology at the Bowman Gray School of Medicine, has been elected president of the Reticuloendothelial Society.

The international organization, established six years ago, has 600 members from 42 states and 33 foreign countries. The membership represents several specialties, including anatomy, biochemistry, Biology,

immunology, microbiology, pathology, pharmacology, and physiology.

Five medical illustrations prepared by George C. Lynch, director of the Department of Audio-Visual Resources at the Bowman Gray School of Medicine, will be included in the permanent collection of the Archive of Medical Visual Resources.

The archive recently was established at the Francis A. Countway Library of Medicine of Harvard University.

Lynch's work to be included in the permanent collection are award-winning illustrations on heart surgery, eye surgery, neuroanatomy, anatomy of the hand, and orthopedic diagnostic signs.

Dr. Courtland H. Davis Jr., professor of neurosurgery, delivered the presidential address at the annual meeting of the Neurosurgical Society of America held March 24-28 in Ojai Valley, Calif.

Dr. Davis, completing a one-year term as president of the society, spoke on "Deform'd, Unfinish'd, Sent Before My Time." The address dealt with the responsibilities of the physician, the family and the community in the long-term management of retarded and neurologically disabled children.

"Habilitation for the child and rehabilitation for the family depend on mutual support and understanding," he said.

Dr. Eben Alexander, Jr., professor of neurosurgery, recently was honored by the Governor's Committee on Employment of the Handicapped for his work with the handicapped.

He was presented a plaque by Gov. Robert Scott, recognizing him as North Carolina's "Outstanding Physician for 1969." The awards ceremony was held March 19 in Raleigh.

Dr. Alexander was selected for the honor by the Executive Committee of the Medical Society of the State of North Carolina.

It was the second consecutive year that a member of the Bowman Gray faculty has been chosen for the award. Dr. Edwin H. Martinat, associate professor of orthopedics and physical medicine-rehabilitation, was named North Carolina's "Outstanding Physician for 1968."

Dr. James A. Harrill, professor of otolaryngology, was installed as president of the Society of University Otolaryngologists at the annual meeting of the organization in Portland, Ore.

Dr. Harrill, who has served as treasurer of the society since it was organized in 1964, succeeded Dr. Francis A. Sooy of the University of California School of Medicine at San Francisco as president.

The Society of University Otolaryngologists was established for the benefit of academic otolaryngologists who are engaged in teaching and research as well as in clinical practice.

Dr. Charles L. Spurr, professor of medicine, recently was appointed to a three-year term as a



They didn't have time to get a cancer check-up either.

They all had something better to do with their time.

They had to work. Or relax with a little golf. Or go to the movies. Or just loaf around.

They couldn't find five minutes for a cancer check-up. So their time ran out.

That's the real shame of it. The fact that every fourth cancer death is totally needless. In many cases, the doctor could have cured the cancer if their patients had come to them sooner.

One thing everyone should do is take time to learn the seven warning signals of cancer. We tell our subscribers they won't prevent them from getting it,

but they could save their life.

Here they are:

1. Unusual bleeding or discharge
2. A lump or thickening in the breast or elsewhere
3. A sore that does not heal
4. Change in bowel or bladder habits
5. Hoarseness or cough
6. Indigestion or difficulty in swallowing
7. Change in wart or mole

Of course, medical research is constantly working to find better ways to cure cancer.

And doctors are quick to put these

discoveries to work.

But there's more than just treatment. There's prevention. We at North Carolina Blue Cross and Blue Shield feel the more your patients know about cancer the better they'll be able to protect themselves against it.

We're also striving to remove the financial barriers for those who need medical care. We maintain a strong, unique relationship with the profession that helps make better health possible for everyone.

We believe there's more to good health than just paying bills.



North Carolina Blue Cross and Blue Shield, Inc.

member of the Medical Advisory Board of the National Leukemia Association.

Dr. Richard L. Burt, professor and chairman of the Department of Obstetrics and Gynecology, recently presented a paper on "Pre-Diabetes and Placental Lactogen" at a meeting of the Southern Obstetrical and Gynecological Travel Club at the Bowman Gray School of Medicine.

Dr. Thomas B. Clarkson Jr., professor and director of the Department of Laboratory Animal Medicine, was a visiting lecturer at Texas A & M University in March. He spoke on "Research in Laboratory Animal Medicine Training."

Dr. R. Winston Roberts, professor of ophthalmology, presented a paper on "New Test for Glaucoma" at a recent meeting of the Eye Study Club in Palm Beach, Fla.

Dr. Hugh B. Lofland Jr., professor of pathology, participated in a conference on Interrelations of Aging and Disease March 9-11 at the University of Washington where he presented a paper on "Genetic Control of Plasma Cholesterol Levels in Nonhuman Primates."

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Two University of North Carolina School of Medicine professors took part in a symposium entitled "Molecular Approaches to Neurobiology" (the biology of the nervous system) in March.

The program was held at the Carolina Inn here and was sponsored by the Neurobiology Program at UNC and the Research Division of the N. C. Department of Mental Health.

Dr. John E. Wilson of the department of biochemistry spoke during the morning session on "Changes in Brain Macromolecules (large molecules) During Behavior."

Dr. Edward Glassman, also of the department of biochemistry and director of the UNC Neurobiology Training Program, was the chairman of the afternoon session."

Surgeons and cancer specialists from seven states met here in April to compare the newest knowledge on breast cancer.

Focus of the program was on early detection of breast cancer, the problem of the second breast and methods of diagnosis and treatment.

Some 100 physicians attended the two-day symposium at the "University of North Carolina School of Medicine."

Each of the 7 speakers was an eminent authority in his own specialty.

Sponsors of the symposium were the Clinical Cancer Training Program of the National Cancer Institute, the N. C. Division of the American Cancer

Society (especially the Harnett County Chapter), and the UNC School of Medicine.

"One of the most striking characteristics about breast cancer is that its occurrence is clearly a function of age," a University of Missouri surgeon said here in April.

Dr. William L. Donegan said that 70% of the breast cancer in women occurs between the ages of 40 and 70.

"After age 30 the incidence increases directly with advancing age, but not at a uniform rate," he said. "Curiously, the rate is greater prior to age 40 to 56 than afterwards."

Dr. Donegan was the opening speaker at the University of North Carolina School of Medicine's "Symposium on Breast Cancer." A cancer specialist, Dr. Donegan is a professor of surgery at the University of Missouri's Ellis Fischel State Cancer Hospital.

The director emeritus of the Albert Einstein Medical Center's Department of Radiology says there is a desperate need for revisions in breast cancer detection methods.

"Self-examination for the detection of early breast cancer is a failure," Dr. J. Gershon-Cohen says.

"Women have religiously heeded the injunction of self-examination and have been responsible for the initial discovery of 95 per cent of their cancers," he says.

But by the time they are discovered (using home methods) the cancer has spread in 65 cases out of 100 and the chances of living more than five years is less than 50-50, Dr. Cohen says.

"The answer to this problem is simple," he says. "We must shift the responsibility for cancer detection back from the patient to the physician, where it belongs."

"If the physician is to assume responsibility for early detection of breast cancer, then he should subject every woman patient over 35 years of age to a careful physical examination of the breasts every six months," he says.

Dr. Cohen is now professor of research radiology at Temple university School of Medicine. He addressed the spring conference on breast cancer at the University of North Carolina School of Medicine.

University of North Carolina Dentistry Professor Roy L. Lindahl has been named to a special American Dental Association Task Force.

This special body has been asked to "design the Association's position on participation in national public health care programs to the public." Their work is expected to take approximately eighteen months.

Dr. Lindahl is the only southeastern representative on the 14 member force.

A member of the North Carolina faculty since 1952, Dr. Lindahl is currently chairman of the American Dental Association's Council on Dental Care Programs. He is also director of the School of

Dentistry's Continuing Education Program and of the Dental Project for the University's Health Services Research Center.

Some 400 students, faculty and parents attended the School of Medicine's 14th Annual Medical Parents' Day in April at the University of North Carolina here.

Highlighting the event was a talk by Dr. Fred W. Ellis, professor of pharmacology, UNC School of Medicine, on "Alcoholism—An Experimental Study on Monkeys and Its Relationship to Man."

A noted British medical educator spoke here on the University of North Carolina campus in April on "Medical Education and the Health Services System."

Dr. Thomas McKeown, a professor of social medicine at the Medical School of the University of Birmingham, England was sponsored by the UNC Health Services Research Center.

One of the world's leading planned parenthood officials visited the University in Chapel Hill in April to consult with officials of the Carolina Population Center.

Sir David Owen, secretary general of the International Planned Parenthood Federation, was here to discuss the possibility of joint overseas programs in India for the Population Center and the IPPF. He became secretary general of IPPF in August, 1969.

The Carolina Population Center here is the world's largest university-based population center. It was founded in 1966 with a \$1.6 million grant from the Ford Foundation and today its major supporters, in addition to Ford, include the U.S. Agency for International Development, the National Institutes of Health, and the Rockefeller Foundation.

Dr. Joseph Dewalt, University of North Carolina Health Service, delivered an address before the Fifth National Conference on Health in College Communities held in April in Boston.

The meeting sponsored by the American College Health Association, focused on "Relationships of Selected Personal Characteristics and Medical History Data to Athletic Injuries."

Dr. Dewalt serves as team physician for the UNC varsity athletics program and is associate physician in the Student Health Service, as well as assistant clinical professor of medicine at N. C. Memorial Hospital.

Cancer treatment at N. C. Memorial Hospital is a team effort, the director of UNC's new x-ray therapy center for cancer treatment said in April.

Dr. Gerald E. Hanks, was a featured speaker at the Fifth Annual Wilson Memorial Hospital Postgraduate Symposium.

The all-day program for practioners in pediatrics, medicine and surgery was designed to cover recent advances in the field of cancer.

The new facility which Dr. Hanks heads in Chapel Hill is part of the University of North Carolina School

of Medicine's division of radiation therapy and is located in the basement of the \$10.4 million Ambulatory Patient Care Center in N. C. Memorial Hospital.

Called the largest and best-equipped x-ray therapy center for cancer treatment in the entire southeast, the new facility is equipped with a 25-million-volt betatron, the first in the state, a supervoltage cobalt machine and conventional x-ray equipment.

Bill G. Harris has been appointed assistant to the dean in the University of North Carolina School of Medicine.

The announcement was made by Dr. Issac M. Taylor, dean of the School.

A computer specialist, his new duties will be related to the assignment of medical school space and programming space for future use. He will also be involved in management information studies.

Harris participated in the development of a special computer to determine lung compliance and airway resistance. Such computers are now in use here at the University of North Carolina, the University of California, Downstate Medical Center in New York and the U. S. Naval Hospital in Da Nang.

Dr. H. Stanley Bennett of the University of North Carolina faculty has been appointed American co-chairman of the U. S.—Japan Committee on Scientific Cooperation.

The Committee was organized as an experiment in the bilateral cooperation of science. The National Science Foundation serves as the coordinating agency for the program.

For eight years the program has promoted exchange of scientists and information and stimulated joint research projects in a number of fields.

Dr. Bennet is Sarah Graham Professor of Biological and Medical Sciences and director of the University of North Carolina's Laboratories for Reproductive Biology.

"Dealing with Abortion in Britain, 1970" was the topic of a special lecture by Dr. D. V. I. Fairweather at the University of North Carolina in Chapel Hill in April.

Sponsored by the Department of Obstetrics and Gynecology and the Carolina Population Center, the lecture dealt with the medical, ethical, administrative and political problems associated with the liberalization of abortion laws in England.

Dr. Fairweather is chairman of the Department of Obstetrics and Gynecology at University College Hospital, London, England.

Dr. Cecil G. Sheps, director of the University of North Carolina's Health Services Research Center delivered the annual Edwin Munich Memorial Lecture at the University of Kentucky in April. The Munich Lecture is a principal part of the University of Kentucky's annual Awards Day program. Dr. Sheps spoke on "Meeting the Crisis of Health Services in the Community."

NEWS NOTES FROM THE NORTH CAROLINA REGIONAL MEDICAL PROGRAM

Dr. F. M. Simmons Patterson, acting executive director of N. C. RMP for two months, has been named executive director. A native of New Bern, Dr. Patterson joined RMP staff as director of the Cancer Program in 1968. He is also assistant professor of surgery at Duke University.

Among Dr. Patterson's first acts as director were the appointments of a deputy director, Ben S. Weaver; and a new director of planning and development, Dr. Lee Holder.

Weaver, who was with Duke University for 11 years, joined RMP core staff last July. He holds the M.B.A. degree from the University of North Carolina at Chapel Hill.

Dr. Holder came to RMP from the University of Michigan, where he received the Ph D degree in Public Health Administration. He is also an associate professor of public health at U.N.C., Chapel Hill.

A new core staff position, Director of Medical Education, has been established at the North Carolinian Regional Medical Program.

The position, to function jointly with N. C. RMP and the North Carolina Medical Society and responsible to both, will be filled in the near future by a physician. The new director will be responsible for continuing education activities of RMP and for the Medical Society's Committee on Continuing Education.

Nearly 100 per cent participation in five out of six participating communities has been reported at the close of the third phase of N. C. RMP's "Continuing Education in Dentistry" project.

Dr. Don L. Marbry, project director, said nearly all the dentists in five of the communities involved have taken part in the three sessions held to date. The project is concerned with the joint responsibility of physician and dentist in the treatment and management of patients with coexisting dental-systemic disorders. Dentists in Greenville, Wilson, Asheville, Reidsville, Hendersonville, and Salisbury are participating.

N. C. RMP's "Cardiopulmonary Resuscitation" project, administered by the North Carolina Heart Association, launches its fourth phase of operation in mid-May when personnel from another group of hospitals will meet at RMP's Durham headquarters for indoctrination. Forty-five hospitals are already involved in the project, purpose of which is to train physicians, nurses, other health professionals and non-medical groups in the techniques of CPR and to assist hospitals in establishing and/or developing CPR emergency procedures.

The project won acclaim recently at the Mid-Atlantic and Southern Regional Conference on CPR Programs, sponsored by American Heart Association and held in Columbia, S. C.

N. C. RMP core staff have prepared their second annual continuation application, which was on its way to Washington at this writing.

The application seeks continuation of 16 N. C. RMP projects, renewal of three, funding of three new projects and approval of one new project.

Projects seeking continuation include:

1. Establishment of a Network of Coronary Care Units in Small Community Hospitals in Appalachia, North Carolina; Robert N. Headley, M.D., project director.
2. Coronary Care Training and Development; James A. McFarland, M.D., project director.
3. Heart Consultation and Education Program; Robert N. Headley, M.D., project director.
4. A Closed-Chest Cardiopulmonary Resuscitation Program; James A. McFarland, M.D., project director.
5. Heart Sounds Screening of School Children; Robert N. Headley, M.D., project director.
6. A Community Program for Early Detection and Management of Hypertension; James W. Woods, M.D., project director.
7. Development of a Central Cancer Registry; James F. Newsome, M.D., project director.
8. Trophoblastic Cancer Project; Roy T. Parker, M.D., project director.
9. Coordinated Oncology Chemotherapy Program; Charles L. Spurr, M.D., project director.
10. North Carolina Tumor Tissue Registry; Herbert Z. Lund, M.D., project director.
11. A Comprehensive Stroke Program for North Carolina; B. Lionel Truscott, M.D., project director.
12. Continuing Education in Internal Medicine; Louis G. Welt, M.D., project director.
13. Continuing Education in Dentistry; Don L. Marbry, D.D.S., project director.
14. Continuing Education for Physical Therapists; Marjory W. Johnson, M.A., project director.
15. Innovations in Clinic Nursing; Susanna Chase, Ed.D., project director.
16. Education and Research in Community Medical Care; W. Reece Berryhill, M.D., project director.

NORTH CAROLINA HEALTH COUNCIL

The Board of Directors of the North Carolina Health Council has presented a Certificate of Appreciation to George P. Harris of Charlotte for outstanding leadership in health affairs in North Carolina.

Mr. Harris, a staff member of The Duke Endowment, has served for a number of years on the Board of Directors of the N. C. Health Council. He is also on the Advisory Committee of North Carolina Health Careers and is a member of the North Carolina Hospital Association's Council on Education and Public Relations.

Mr. Harris has been a member of the Committee on Accounting and Statistics of the American Hospital Association and is co-author of the

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UNITED STATES PHARMACOPEIA

The U.S.P. Committee for Revision that will be responsible for the preparation of the United States Pharmacopeia to appear in 1975 was elected at the April 10 session of the U.S.P. Convention, it is announced by Mr. William Heller, executive director, who is also chairman of the committee. Other actions taken by the Convention delegates included placing all Pharmacopeial activities on a five-year cycle, rather than on a decennial basis as in the past. Thus the new Revision Committee is to serve from 1970 to 1975.

The General Committee of Revision comprises 60 members, of whom 20 are qualified in the medical sciences and 40 in the pharmaceutical and allied sciences, together with the executive director, who is also Chairman of the Committee.

The Eighteenth Revision of the Pharmacopeia, U.S.P. XVIII, was published on April 8, and will become official September 1, 1970. Revision problems not resolved at the time of publication will continue to receive priority consideration with a view to adoption of interim revisions; however, no date has been set for issuance of the first U.S.P. XVIII interim revision announcement.

The Month in Washington

The Nixon Administration proposed that prepaid, closed-panel group practice health care be authorized under both Medicare and Medicaid.

The American Medical Association recommended to the House Ways and Means Committee a new Medicaid plan utilizing existing private health insurance mechanisms to replace the present program of health care assistance for the medically indigent.

Robert H. Finch, Secretary of Health, Education and Welfare, said Congress would be asked to approve legislation authorizing "health maintenance contracts guaranteeing health services for the elderly and the poor at a single fixed annual rate for each person served."

"In the case of Medicare," Finch said, "the patient will be entitled under such a contract to all of the usual Medicare services plus preventive services. The contract price will be negotiated in advance at an amount less than the Social Security Administration presently pays for conventional Medicare benefits in the locality.

Similarly under Medicaid we are seeking authority for the states to offer to the poor the option of

securing services under such health maintenance contracts. We propose to work with the individual states toward the modification of their present programs in this regard and to encourage their use of the experimental authority previously mentioned for the testing of a variety of different contractual arrangements.

"The cornerstone of this new option in federal health purchasing will be the opportunity for consumers to choose between alternatives. The ultimate goal will be to give every beneficiary of these programs a choice between obtaining services from a health maintenance organization or arranging for them in the usual way from individual doctors and hospitals. He will have the choice of withdrawing from enrollment in a health maintenance organization if he finds the service unsatisfactory. The government will have the choice of entering into arrangements with individual health maintenance organizations, subject to special standards including assurance that every contractor will serve persons of high medical risk as well as the healthy."

Earlier, HEW under Secretary John G. Veneman told the house committee that it was planned to call the new approach under Medicare Part C—to provide all services covered under Parts A and B "plus preventive services." He estimated a saving of about \$15 per person, but some committee members were skeptical that more services could be provided at less cost.

Both Finch and Veneman made clear that one of the main objectives is a fundamental delivery. They said states would ask to repeal existent laws restricting prepaid group practice. They said that future federal medicaid funds might be made contingent on states eliminating "legal barriers to all forms of health delivery organizations."

Dr. Russell B. Roth, speaker of the AMA House of Delegates, told the House committee that Medicaid "has demonstrated some weaknesses which badly need correction."

A new program, he said, should: "provide the Congress with a basis for reasonable predictable costs; ease the burden on the states; assure total implementation; and while maintaining a level of quality, insure that the costs of the program remain within the range of acceptability."

The program recommended by the AMA had these features;

1. Each eligible person (or family) would receive a certificate to be redeemed by a

qualified health insurance company offering a health policy or contract of certain basic health benefits such as hospitalization, medical care, preventive care, and diagnostic and outpatient care.

2. The premium cost for such policy or contract would be assumed by the federal government from its general revenue fund.

3. The states, freed from the expense of financing the basic costs of health care for their indigent and medically indigent residents, could provide supplementary benefits. These might include, for example, skilled nursing home care and dental services.

4. The determination that an insurance policy or contract, and the company offering same, are "qualified" would be made by a state agency which customarily has that authority. However, changes in the scope of benefits, and guidelines or standards to be used by the insurance departments in judging the company and the plan it offers, would be established by a national board appointed by the President.

5. All individuals and families below a certain level of income would be eligible to participate. A simple determination of eligibility could be made by the appropriate federal agency on the basis of income, or an even more refined criterion could be used such as tax liability. The program could require marginal needy families to participate in the expense of the premium charge by paying a small part of it, varying such participation in direct proportion to this tax liability.

6. For the lower income family there would be no deductibles and no co-insurance features.

7. To insure a high level of quality and to prevent cost escalation, the program would provide for a system of "peer review," organized and conducted in a manner to assure its success.

As to those services and charges which are within the purview of the medical profession, appropriate medical societies would be given the task of establishing a peer review mechanism that would, among other things, review individual charges and services wherever performed; review hospital and skilled nursing home admissions as to their medical necessity, and stays in hospitals and

skilled nursing homes as to their continued medical necessity; and review the need for the professional services provided in the institution.

In the case of fraud or other clear intentional and gross misconduct, the peer review committee would be expected to bring charges before the appropriate licensing body.

To assist peer review committees in becoming established and in their operation, the program should provide for federal participation in the cost incurred in developing the program and its operation. To assure participation by members of the profession, those who serve on peer review committees should be held harmless from any action or claims based on their decisions as to the necessity or quality of the services provided, or the reasonableness of the charge.

In the event that a peer review committee is not established by the appropriate medical society within a reasonable time, or although established is not functioning, the Secretary of Health, Education and Welfare in consultation with the medical society, would be empowered to appoint a committee to so act.

The American Medical Association supports the Nixon Administration's air pollution control bill (s. 3466) which would give the Department of Health, Education and Welfare power to set air quality standards for the nation.

The legislation also would provide for intensified research in air pollution and for tough enforcement procedures on the national air purity standards.

The AMA also supports accompanying legislation providing for expanded research on ways to cut auto exhaust pollution and for pollution control standards for watercraft and airplanes.

States must report to the Internal Revenue Service each year on total payments to providers of Medicaid services under new regulations issued by the Department of Health, Education and Welfare.

Each year, states will file Internal Revenue Service Forms 1096 and 1099 giving amounts paid to physicians, dentists, pharmacists,

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President's Address

Here's To Our Good Health

EDGAR T. BEDDINGFIELD, JR., M.D.

There is a phrase in the 19th Psalm which reads as follows:

"Day to day pours forth speeches."

I am certain that these words express the feelings of some of you who have been in faithful attendance at the various meetings of this One Hundred Sixteenth Annual Session of the Society, and it is a fairly accurate one-sentence summary of my one-year term as your President. Sometimes, perhaps too often, I have been on the sending end of the speeches, but I have also been on the receiving end, and as I have traveled about in an effort to represent you, I have been fortunate enough to hear - and carefully listen to - the thinking of some of the best brains in this state and nation, on the general topic of health care.

These thoughts to which I have been exposed came from spokesmen within and without the profession. I would be insensitive indeed had not this steady perfusion of information and philosophy had some impact upon my own thoughts in regard to certain facets of health care, and today I would like to present a bit of my distilled thinking on certain aspects of health care problems and opportunities. Time does not permit me to document the background leading to some of these observations, nor to justify them. They are nonetheless my own impressions and conclusions as I reach this final day of my term of office, and are thus perhaps in the nature of a "debriefing," or "the unmaking of a presidency."

Health Care- A Public Concern

Matters relating to adequate health care are truly a matter of great public concern. In a conversation with Attorney General Robert Morgan a few months ago, he informed me that in his travels around the state he sensed that adequate health care is currently the issue of primary concern to the mass of our citizens. He said that more concerned interest is expressed to him on this topic than on any other important issues of the day, including the war, "law and order," or social upheaval in our schools.

On Jan. 22, in a major address delivered in this room, Governor Robert W. Scott stated that we no longer have an *impending* crisis in health care in our state, but an *actual* crisis, here and now. At the recent meeting of the North Carolina Consumers Council, the participants were allowed freedom of choice in attending one of several workshops directed toward various areas of consumer interest. Attendance at the workshop on Health Care and Costs far outstripped that of the others.

Thus we cannot take comfort in a belief that the voices raised in concern about health affairs are *only* the abrasive and sometimes hostile voices of a managed press, social reformers, television documentaries, or public officials. On this matter, the "silent majority" is deeply and genuinely concerned, and is increasingly voluble.

In my view, although the matter is indeed complex, the fundamental causes of the current health care "crisis"—if that is the appropriate term, and I have some doubt that it is—are basically these three:

Read before the Second General Session, Medical Society of the State of North Carolina, Pinehurst, May 19, 1970.

Request for reprints to the Wilson Clinic, Wilson, N. C. 27893.

1. A public awareness that good health care can and does improve the length and quality of life.

2. Political and legislative action which has caused government, properly or improperly, to assume obligations to provide personal health care as a *right* of citizenship.

3. The failure of the establishment, including the schools and the private sector, to identify and react appropriately to this increased demand, and to apply already available knowledge and technology to improve the management and delivery of modern health care.

A Backward Glance

How did we arrive at this point? Let's take a moment to look at history, especially here in North Carolina.

In my inaugural remarks a year ago, I noted that North Carolina medicine had its very earliest beginnings in the first settlement colony sent to our shores by Sir Walter Raleigh in 1585. This colony, landing at Hatteras, consisted of 108 men, including one physician. I cannot resist the comment that Eastern North Carolina has not enjoyed such a favorable physician-population ratio since that time!

Along with the rest of the nation, health care in North Carolina proceeded along an apparently comfortable level (for that time) during the periods of colonization, independence, and industrialization. People didn't have much by present standards, but they didn't expect very much. To be sure, there were major milestones which had their impact - such as the organization of public health services; the advent of sanitation; the development of pathology, anesthesia, and surgery; and the improvement in medical education. At the risk of minimizing such epochal advances, however, one must conclude that, in general, the quality and quantity of health services - largely of the horse and buggy type - satisfied the predominantly rural, unsophisticated population of those days.

About the time of World War II, however, many extremely important changes occurred in rapid-fire order:

The advent of specialization.

The obvious advantages of improved hospital care.

The development of antibiotics and other specific therapeutic tools.

The social recognition of the need for methods of financing an ever more attractive system of health care.

Improved communications via radio, the press, public education, and the increasing mobility of the population.

All these developments served to create an awareness among our people that things could -- and should -- be better.

The Good Health Movement

All these factors, and other not enumerated here, created a ground swell which led to an extremely important movement in this state: the North Carolina Good Health Movement of the 1940s.

On Jan. 31, 1944, at a meeting of the Board of Trustees of the University of North Carolina, Governor J. M. Broughton presented, with strong approval, a report from a committee of distinguished physicians (including the President, the President-elect, and three past presidents of the State Medical Society) appealing for a great forward step in the life and progress of North Carolina. These leaders of the medical profession pointed out that North Carolina then ranked 11th among the states in population, but 42nd in the number of hospital beds per 1000 population and 45th in the number of doctors per 1000 population; and they joined Governor Broughton in recommending far-reaching remedies. This report was endorsed by the Governor and the University trustees; whereupon the Governor established the State Hospital and Medical Care Commission, which set about investigating conditions, scrutinizing defects, and weighing suggested remedies. Subcommittees were named to study the following areas (And how pertinent to the problems of 1970 they seem!):

Hospital and medical care for our rural population

Hospital and medical care for our industrial and urban population

Special needs of our Negro population

Hospital and medical care plans in other states

Four-year medical school for university and hospital facilities.

After nearly eight months of investigation and study, the commission presented to the people of this state the following findings and recommendations:

1. Our basic and permanent aim should never be at any time less lofty and comprehensive than the Governor's declaration approved by the 100-man Board of Trustees of the Greater University. The ultimate purpose of this program should be that no person in North Carolina shall lack adequate hospital care or medical treatment by reason of poverty or low income.
2. In order both to remedy the most urgent needs of today and work toward the larger programs of tomorrow, three things are supremely needed:
 - A. MORE DOCTORS
 - B. MORE HOSPITALS
 - C. MORE INSURANCE

There were other recommendations which time does not permit us to explore, but which make interesting and timely reading. They dealt in detail with problems of physician distribution; access to health care by the poor, the black; maternal and fetal mortality; financing mechanisms; political ideologies, etc.

The final report of the North Carolina Hospital and Medical Care Commission was presented to then Governor Cherry and to the General Assembly on Feb. 10, 1945, and was heralded as "a program of great hope, of almost infinite promise, and of great practicality."

The report contained a number of far-ranging recommendations, and it was recognized that, with the nation still at war, some time would be required for full implementation. Even in those distressed times, however, Governor Cherry and the General Assembly plunged courageously forward and set the wheels in motion. Progress continued with the end of the war and subsequent legislative acts, so that within a decade most of the *quantitative* recommendations had been accomplished.

We had a new four-year medical school. We had a new teaching hospital. We had a far-flung system of community hospitals. We had a system of providing health care for the indigent. We had an expanded program of voluntary health insurance. We had an improved program of public health. We had an improved program of mental health.

A Hard Look at the Present

These were the major accomplishments of an exciting decade. Why then, does our Governor and other public officials declare a state of crisis in our health care system of 1970? Where have we failed?

The obvious answer is that our far-sighted planners of the 1940s were not far-sighted enough, nor could we expect them to have been. Demands have exceeded all projections, and we who have succeeded the visionaries of that day have not continued to make ongoing plans or refinements of our needs and goals.

We are not without resources. Substantial improvements *have* been made—in manpower, facilities, and financing. But they have simply proved grossly inadequate.

I would offer the generalization that we have done an excellent job in the area of physical facilities. Although specific areas of gross need still exist, and many areas need modernization and refinement and some expansion, the state is fairly well blanketed with community hospitals which, on balance, are quite good.

We have new resources, and improved resources, in providing mechanisms for financing care, with respect to both voluntary insurance purchased by either the individual or his employer, and to government programs aimed at specific population groups, such as Medicare, Medicaid, vocational rehabilitation, workmen's compensation, crippled children's programs, cancer programs, programs of the Blind Commission, the Veteran's Administration, and others. Although our financial mechanisms have improved and our resources have increased, they have not kept pace with the need and demand brought on by an awesome escalation of costs. We need constantly to seek better methods of meeting these costs, and of reducing costs wherever possible by more economical utilization of existing as well as new forms of health care delivery.

The Manpower Crisis

It is in the area of manpower that we have failed most miserably. However adequate and sophisticated the facilities, and however plentiful the financial resources, we cannot

escape the fact that it is *people* who deliver health care to *people*. North Carolina continues to be plagued by severe problems in both numbers and distribution of health personnel. We are woefully ill supplied with every type of health manpower, but I speak especially of our shortage of physicians. In 1969 the Legislative Research Commission of the North Carolina General Assembly reported as follows:

"North Carolina is near the bottom of the list in regard to physician-population ratios. It has only about 69 per 100,000 population in private practice compared with the national average of about 97. More distressing to many, particularly those in the rural part of the State, is the declining number of general practitioners, now only 1,225 or about 1 per 4,000 citizens."

"The urban areas of North Carolina have about 96 physicians per 100,000 persons, while the rural areas have only 30, indicating the urban concentration of physicians ---- In addition, 12% of all the physicians now in practice in the rural areas of the State are over 70 years of age. This indicates that the discrepancy between the larger towns and rural areas is likely to increase."

"In 1967, specialists in solo, partnership, group, or other practice outnumbered general practitioners by almost two to one in North Carolina."

"All new physicians are oriented by their medical school curriculum toward specialty practice. The schools are not doing the job of training family practice physicians; they consider the general practitioner a relic of the past, despite the needs of a significant number of our citizens."

Thus one of our principal and most crying needs is more physician manpower. I personally submit that this means that we need to expand the enrollment of existing medical schools, to prod the schools into constantly reexamining their curricula and length of training; and to see that the state continues to consider seriously the establishment of another school of medicine. I still hold the conviction that even with the most optimistic projections of increased output from existing medical schools, a decade hence the projected increase in population will completely absorb that supply, and we will be no better off than we are today unless a new supply of physicians is developed.

Winds of Change

At this juncture we should note some attitudes and changing attitudes of the concerned parties.

The practicing physician and his medical society: Without elaboration, and despite notable exceptions I feel that we must acknowledge that far too long many of us have been guilty of apathy and an inflexible resistance to change. This is largely due to frustrations resulting from distorted, exaggerated, and unwarranted attacks on our competency, motives and integrity, coupled with overwork, fatigue, and fear of government domination and an ultimate loss of freedom, and not quite knowing what to do about it. We are emerging from this apathy. At our sessions here, the policy determinations in such areas as physicians' assistants, environmental health, admission of medical students to Society membership, and health planning, all provide some indication of our receptivity to the voices abroad in the land.

The medical schools. Having made some confessional for private medicine, I shall not allow the schools to escape unscathed. They too have shown inflexibility and resistance to change. I vigorously take exception to the claim expressed in the past that they have no control whatever as to the type of practice or the location of practice their graduates ultimately choose. I say they do play a part—or should—by their admission policies, and by the climate of the school and the attitudes of the faculty. These factors must not be overlooked in considering the problem of manpower distribution.

Similarly, most of our schools have paid little or no attention to the problems of community medicine and family practice until prodded by certain stimuli: the availability of federal and state grants, the development of student interest and creative activities, and the threat of some competition in the form of proposals for new schools beginning to loom on the horizon.

But here, too, there is heartening evidence of responsiveness. Departments of community medicine and family practice are being established. Better and more frequently available lines of communication with the practicing profession and all levels of government have been achieved. The voice of the socially concerned student has been heard and is being heeded. And, of extreme importance, our faculty and students are

beginning to go outside the academic setting into the communities across the state, to view the problems of the physicians and their patients first hand. I believe that this exposure will be good for all of us. Hopefully, it will lead to a rapid extension of medical school activities into many of our community hospitals.

Government. As always, we have some responsible statesmen, and we have a generous supply of political opportunists. We have exponents of new ideologies who find it expedient to use the convenient whipping-boy of health care as a vehicle for advancing their basic philosophies. Our concerned statesmen realize that Americans will not benefit by, and would not be satisfied with, a national health insurance program based on the British or European models. Responsible statesmen realize that the continued transfusion of more and more dollars (of less and less value) serves mainly to further intensify the demand for services already in scarce supply. And yet these statesmen cannot ignore public pleas that some improvements be made. They realize that these changes must be pursued with deliberate speed and based on careful planning and successful models, developed under such programs as Comprehensive Health Planning, Regional Medical Programs, and Health Services Research.

The consumer. Consumer voices are coming through loud and clear, not only from the ghetto and rural areas, but also from the urban affluent. The prime cry is for more

doctors. Citizens are willing to be taxed to achieve this if results can be reasonably assured. In the long view, the consumer must realize that doctors cannot be all things to all people; that we must achieve a reasonable measure of *basic health care*, equitably distributed, before we can seriously consider *comprehensive health care* promises. However, we cannot hide behind that observation. We must be responsive. Medicine has more to fear from the slow burn of the dissatisfied patient than from the threat of Big Government. Although the militant Ralph Nader type of consumerism has been oversold, and is chiefly notable for its value to the news media, reasonable, rational, informed consumerism is no bad thing for medicine.

Conclusion

I am certain that organized medicine, if it remains free to do so, can and will live up to its vast potential for problem-solving. But whether it does or not will depend on the degree and quality of support it gets from its members. Verbal support is not enough; passive agreement with policies are not enough. We need your time, your energy, and some of your dollars. Our problems are legion, but soluble with energy, forbearance, and good will. I invite each of you to intensify your own interest and participation.

And with it all, as might nowadays be said, "Keep your cool." However, I prefer the Oslerian admonition, "Maintain your equanimity."

Endurance Training For Middle-Aged Men

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HENRY MILLER, JR., M.D.

Studies concerning the etiology of coronary heart disease (CHD) have isolated many risk factors such as lack of exercise, obesity, hyperlipemia, hypertension, and excessive cigarette smoking.^{1/2} Graham³ and Cureton⁴ state that although the development of CHD is the result of the complex interaction of these factors, endurance training* appears to have an indirect effect on many of them, such as the reduction of body weight and the percentage of fat, blood pressure, and serum lipema. Although there is much evidence available which describes the effects of training programs on physical fitness, the term "physical fitness" means something different to everyone. In general, training (physical fitness) programs should be prescribed which lead to optimal circulo-respiratory, physique, and motor development, with the emphasis dependent upon the age, need, and specific goals of the group or person involved. The needs of elementary school children, college athletes, and middle-aged men clearly differ. Evidence points to the need for endurance training for preventive and rehabilitative measures in combatting CHD and survival from coronary ischemia.^{5/6/7} Scientifically well-rounded training regimens are particularly important because of the magnitude of the decline of efficiency of the circulo-respiratory systems (CRS) with age and its possible effect on health. This discussion will be limited to regimens geared mainly for the orderly CRS development of the average citizen.

The "average United States male citizen" may be defined as clinically asymptomatic, sedentary, and between 25 and 60 years of age. He is busily involved in the routine of supporting a household and generally has not participated in any regular vigorous activity

since his school days. The working capacity and efficiency of this citizens drops markedly between ages 20 and 30 and continues downward throughout life.^{8/9} Cooper[†] states that in most Scandinavian countries this decline occurs approximately ten years later, and to a lesser extent than it does in this country. He concludes this to be a result of their higher daily activity patterns. Longevity rates of these countries appear to parallel these data, with the United States ranking eighteenth among all nations and Scandinavians at the top.

Training Programs

Energy cost

Energy cost is the key to a successful endurance training program. Regimens low in energy expenditure, such as golf, bowling, and weight-lifting, and many other game activities are intermittent and therefore require few kilocalories (Kcal) of work.^{10/12} Contrary results are found with the so-called high energy cost activities such as running, orienteering, swimming, skiing, walking, and cycling.^{12/15} The energy cost of a program must be studied in relation to its intensity, duration, and frequency.

Intensity. Karvonen¹⁶ trained men one-half hour to five times per week and found no improvement in circulatory performance while running on a treadmill if the sustained heart rate was less than 135 beats per minute (bts/min). Subjects whose sustained heart rates were above 153 bts/min showed significant increases in cardipulmonary function. Hollman and Venrath,¹⁷ in a similar experiment conducted on a bicycle ergometer, found that heart rate values of 130

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*Endurance training is defined as exercise that is continuous (generally at least 15 minutes in duration) and vigorous enough to stimulate the circulo-respiratory systems so that minimal heart rates of approximately 135 beats per minute are sustained.

†Workshop on Physical Exercise and Heart Disease, American and South Carolina Heart Association, May 6-8, 1969, Myrtle Beach, South Carolina.

bts/min were needed to stimulate a training response. These data suggest that young men must exercise at a heart rate level equal to 60 per cent of the difference between their maximal and resting heart rates. Astrand et al¹⁸ state that one should train at approximately 50 per cent of his maximal oxygen consumption (Max VO_2), which is in agreement with Karvonen,¹⁶ and Hollman and Venrath.¹⁷ Shephard¹⁹ reported improvements in Max VO_2 with heart rates of only 120 bts/min and concluded that the magnitude of stress needed for cardiovascular development may not be the same for all populations. This may be particularly true with sedentary middle-aged and older groups, as well as the less physically active populations found in Canada and the USA.

Duration. Improvements in cardiopulmonary status have been found after six to ten training sessions which last only five to ten minutes a day.¹⁹ Hollman et al²⁰ found increases in maximum oxygen pulse (from 14.8 to 17.6 ml/beat) in subjects who did stationary running ten minutes a day for a period of three months. These improvements are considered minimal and amount to less than 5 or 10 per cent Max VO_2 . If one's initial fitness level is extremely low, then more improvement can be expected.¹⁸

Frequency. Pollock and co-workers^{21,22} found improvements in cardiopulmonary function in direct proportion to the frequency of training (two days versus four days a week). Between-group differences were more pronounced in the latter stages of the program (20 and 16 weeks, respectively), during which time the work rate was above 300 Kcal per exercise session. Bartels et al,²³ in a similar study, found no between-group differences after 7 and 13 weeks of training. If Pollock had terminated his investigation after only eight or ten weeks of training (mid-point of two studies), he would have reached the same conclusions as Bartels. Optimal training improvements do not occur immediately and may require many months of concentrated effort; therefore, conclusions based on short-term data should be interpreted with caution.

Regularity is an important factor in obtaining optimal cardiovascular fitness

(OCVF). Training effects begin to decrease after a three or four-day layoff. Once one has become trained, a moderate level of OCVF can be maintained by training every third day.¹² It appears that if the magnitude of exercise required in training is between 80 and 90 per cent of maximal capacity, OCVF can be developed and maintained by training two days per week. Observations from our laboratory reveal a 50 to 60 per cent loss of previous improvement based on the response to a standard heart rate test by subjects who refrain from training during the summer months.

Optimal Cardiovascular Fitness (OCVF)

Most of the above evidence refers to minimal improvement of cardiovascular function and does not consider improvement in relation to OCVF. Max VO_2 is thought to be one of the best indicators of cardiovascular function,^{7/24} and because body weight shows a high correlation with oxygen utilization, it is usually expressed in ml/min-Kg. Therefore, Max VO_2 will be used as a reference to illustrate OCVF development.

It is difficult to set a standard for OCVF because a specific level of Max VO_2 for optimal health has not been determined. The Table shows differences in Max VO_2 for trained and sedentary adult males. Sedentary males characteristically fall below 40 ml/min Kg while trained groups are above 44 ml/min-Kg.

Balke²⁵ and, more recently, Cooper²⁶ tested hundreds of air force personnel and concluded that a Max VO_2 of 42 ml/min-Kg depicts OCVF. The results from the Table and Balke's and Cooper's conclusions appear to agree; but, because of the limitations of a point value for all ages and body builds, a range scale seems more practical—possibly 38 to 44 ml/min Kg.

Improvements in cardiovascular function are generally achieved in proportion to the amount of energy expended. Therefore, exercise regimens should be geared to elicit a response of sufficient Kcal expenditure to develop and maintain OCVF.

What type or pattern of program is best designed for the development of OCVF?

Cureton has been using "progressive continuous rhythmical exercises" for more than 20 years to achieve OCVF.^{4/27} His program is designed according to the principles of progression (begins slowly with a gradual build-up of workload as training proceeds), continuous or nonstop performances ranging from 30 to 90 minutes, and rhythmical activities such as walking, skipping, and jogging to light or moderate calisthenics. Heavy static exercises are avoided because of the effects of the Valsalva maneuver.²⁸ Each training session is designed to expend between 300 and 500 Kcal of energy. The precise calorie expenditure depends upon the fitness level of the subject. Cureton recommends a minimum of three

Both investigators subscribe to the thesis that OCVF is achieved and maintained only through systematic exercise.

Special Considerations For Training Sedentary Adults

The purpose of a training program for the average adult is quite different from that designed for the athlete. The athlete is much younger and can adjust and recover from strenuous work much more readily. Training is conducted in relation to a specific event or activity and is generally planned around a competitive season, since competition influences motivation toward training results. The training regimen of the adult is designed to

Table 1

Effects Of Training On Maximal Oxygen

Intake Of Middle-Aged Men

Investigator	No.	Mean Age (years)	Maximal Oxygen Intake			Per Cent Change
			T ₁	T ₂	T ₂ -T ₁	
Cureton and Phillips ⁴³	6	33.8	26.5	50.2	24.7	93
Naughton and Nagle ⁴⁴	18	41.0	31.3	36.8	5.5	18
Naughton and Balke ⁴⁵	6	29.5	31.6	45.3	13.7	43
Ribisl ⁴⁶	15	40.2	40.1	45.5	5.4	14
Hanson ⁴⁷	7	48.9	35.8	42.1	6.3	17
Oscari*	14	37.0	38.8	47.1	8.3	21
Pollock ²¹	19	32.5	37.2	46.2	9.0	24

*Presented before the American College of Sports, National Convention, May, 1968.

training sessions each week and believes that five sessions represent the optimum.

Cooper's program of aerobics²⁶ is based upon a Kcal expenditure scale and includes a variety of activities such as running, swimming, and handball. By determining energy cost, Cooper assessed the Kcal cost per minute of these activities and assigned point values to them in relation to their degree of intensity and duration. He found that it did not matter what activity was used to obtain OCVF as long as 30 points were earned each week. A 30 point per week program might include running two miles in less than 16 minutes three times a week, walking three miles in approximately 40 minutes five times a week, or playing handball for 50 minutes, four days a week.

Although Cureton and Cooper have different programs, each is based upon energy cost.

achieve and maintain OCVF throughout life. Most often training is directed toward reconditioning and preservation. With these goals in mind the following special points are considered in developing training programs for the average citizen.

1. A complete medical examination including a thorough cardiac appraisal is recommended before beginning an exercise program. In our laboratory, a physical fitness profile analysis is completed by every man entering the program. The analysis includes a health survey questionnaire, a cardiovascular function appraisal which includes an actual²⁹ or predicted Max VO₂ test,³⁰ an exercise ECG,³¹ and a heart rate response to a standard work task.³² We have found the treadmill more desirable for evaluation purposes than either the bench stepping or bicycle ergometer techniques because Ameri-

cans are more adept at walking and running than stepping and cycling.³³ If a treadmill is not available, the latter methods are acceptable. The Double Master's Two-Step,³⁴ the graded exercise test (GXT),³⁵ the Progressive Pulse Ratio Test,⁴ five-minute step,²⁴ and Kasches All-out Step Test³⁶ can be used satisfactorily. The profile also involves an appraisal of physique including girth, body weight and composition measures; and a motor efficiency appraisal — *e.g.*, muscular strength and endurance, and flexibility measures. Serum lipid determinations (serum cholesterol and triglyceride), a post-prandial blood glucose evaluation, and spirometry are also recommended.

The data are then compared to norms and used for purposes of initial appraisal and prognosis. This type of evaluation also affords an excellent base line for future comparison and evaluation.

2. *Training should be individualized.* Individual needs will be apparent upon completion of the medical and physical fitness examinations. Although we recommend a group or subgroup (more specialized with homogeneous ability levels) technique of training, individual loads can be regulated by adjusting the pace, duration, and repetition characteristics of the regimen. For example, if one were following a walking and/or jogging program, he should use a known distance course such as a quarter-mile track, and should have access to a wrist watch with a sweep second hand or a stop watch. A log should be maintained of the distance run or walked each day and the pace at which it was covered. As one becomes more fit, the run-to-walk ratio can be increased or the time required decreased or both.

Initially the run-to-walk ratio should be equal and consist of approximately 110-yard intervals (easily followed on a quarter-mile track). As adjustments take place, increase the running distance by 110-yard increments up to one lap (440 yards), with one lap additions coming thereafter. Walking distance should increase in proportion to the running interval up to approximately one lap. At this time the running interval will increase while the walking interval remains constant or eventually diminishes or both. Recommended beginning walking and running paces for

110-yard intervals range from 55 to 65 seconds and 30 to 40 seconds respectively. Continuous walking is also recommended as long as it stimulates the heart rate sufficiently to meet the criteria outlined earlier. We have just completed a five-month walking program with men between 40 and 60 years of age.* These men walked from four to five and a half miles per hour for 40 minutes, four days per week, and showed consistent improvements in cardiovascular function and body composition. Which exact combination one initiates and how fast progression occurs is dependent on many factors, among which are initial fitness level, state of health, and age. We recommend a conservative approach to this regimen.

3. *Slow progression* is important. Although it has been emphasized that endurance exercise is not easy and that the utilization of approximately 300 Kcal per exercise session is necessary for OCVF, beginners must recognize their initial inability to adapt to this magnitude of effort. The training scheme should emphasize slow progression and begin at the 150 to 200 Kcal level of expenditure. Low gear starter programs such as Cooper's Categories I and II²⁶ or Cureton's low gear training regimen²⁷ should be used. A regimen such as this would include light calisthenics (10 minutes) followed by 15 to 20 minutes of walking and jogging (refer to section 2). The program should not produce excessive fatigue, and a day of rest should be allowed between sessions. This will help to avoid muscle soreness and allow time for recuperation. Exercises requiring static stretching²⁴ and walking on the rest day will help alleviate soreness. Optimal training effects are not manifest until there have been months of progressively harder work. Therefore, it is necessary to avoid the temptation to attempt "too much too soon." After three to five months of training a four or five day program can be successfully followed.

4. *Check heart rate periodically* during training and record it in your daily log. As mentioned earlier, heart rate is a good indicator of intensity and can give one an

*Pollock, M., Janevay, R., and Miller, H.: The effects of walking training on adult men, in preparation.

objective basis for evaluating progression and improvement in fitness. Heart rate can be obtained by the palpation technique of the radial or carotid arteries; after exercise we have found the apical pulse rate to be the best indicator. Heart rate estimation must begin as soon after cessation of work as possible, because the heart rate will decrease quickly, thus resulting in spuriously low values. A ten per cent error has been reported after moderate exercise when counts were taken within a 15- to 20-second period after exercise.³⁷ Therefore, we recommend that heart rates be counted for just ten seconds (beats/10 seconds).

Is there any danger in training at a too rapid heart rate level? Should beginners use some sort of caution? As mentioned earlier, there appear to be minimal heart rate levels at which cardiovascular improvements can be expected, but the level above minimal values which is considered safe is somewhat controversial.³⁸ Costill³⁹ showed that marathoners (age range from 21 to 49 years) run at heart rates well above 170 beats/min. Many highly trained runners are capable of running several miles at heart rates greater than 90 per cent of maximum.*

The population we are concerned with in this paper does not have these capabilities and could be in possible danger if heart rates were excessively high. Therefore, guidelines have been suggested for use with adult men who are beginning training programs.** These guidelines suggest heart rates not exceeding 150 beats/min for men under 50 years of age and 140 beats/min for men over 50 as safe beginning target heart rates. Lester, Sheffield, and Reeves³⁸ feel these values are too conservative for healthy adults.

The figure is an attempt to establish target heart rates for training which are adjusted for

age.* Per cent maximum heart rates ranging between 70 and 85 per cent are generally recommended. With improvement in physical fitness and careful consultation with physicians and exercise specialists, higher workloads can be safely accommodated.

5. *Warm-up and taper-down periods* are advocated prior to and after every training session. These procedures aid the body in adjusting to increasing work rates and to recovery from them. Adjustment requires approximately five to ten minutes before and after training and should include stretching, light calisthenics, walking and jogging.²⁷

6. *Leg and foot problems* should be anticipated and attempts made to avoid them. These problems are most prevalent with newcomers because the muscles which support the feet and arches are often weak and tight. Special exercises designed to stretch and strengthen the anterior and posterior foot and leg muscles are recommended. The avoidance of sharp turns and the provision of soft textured surfaces for running will help to minimize knee, leg and foot problems. Added protection can be gained by wearing quality shoes. They have soft textured soles and provide good arch support.

7. *Intermittent running and walking* (interval training) appears to be more advantageous for beginners than is continuous running. The rest interval between trials allows for partial recovery; and, since a lower oxygen deficit is developed, more total work per training session can be accomplished.

8. *Hot and humid temperatures* are a signal to slow down and take caution. Working capacity (endurance) is significantly reduced when ambient temperatures and relative humidity are high.^{40/41} This is a result of a shift of blood flow to the periphery for dissipation of metabolic heat and hence thermo-regulation. Therefore, exercise plus heat places added stress on the cardiovascular system. Buskirk and Bass⁴¹ and Murphy and

*Per cent of maximum heart rate is determined as outlined by Karvonen:

$\%MC = RHR + \%TL \times (MHR - RHR)$, whereby

$\%MC$ = per cent maximal capacity

RHR = resting heart rate

MHR = maximum heart rate

$\%TL$ = per cent training level

**Workshop: Exercise in the Evaluation, the Prevention, and the Treatment of Heart Disease. May 6-8, 1969, Myrtle Beach, South Carolina, Sponsored by The American and South Carolina Heart Associations, the South Carolina Regional Medical Program, and also the President's Council on Physical Fitness.

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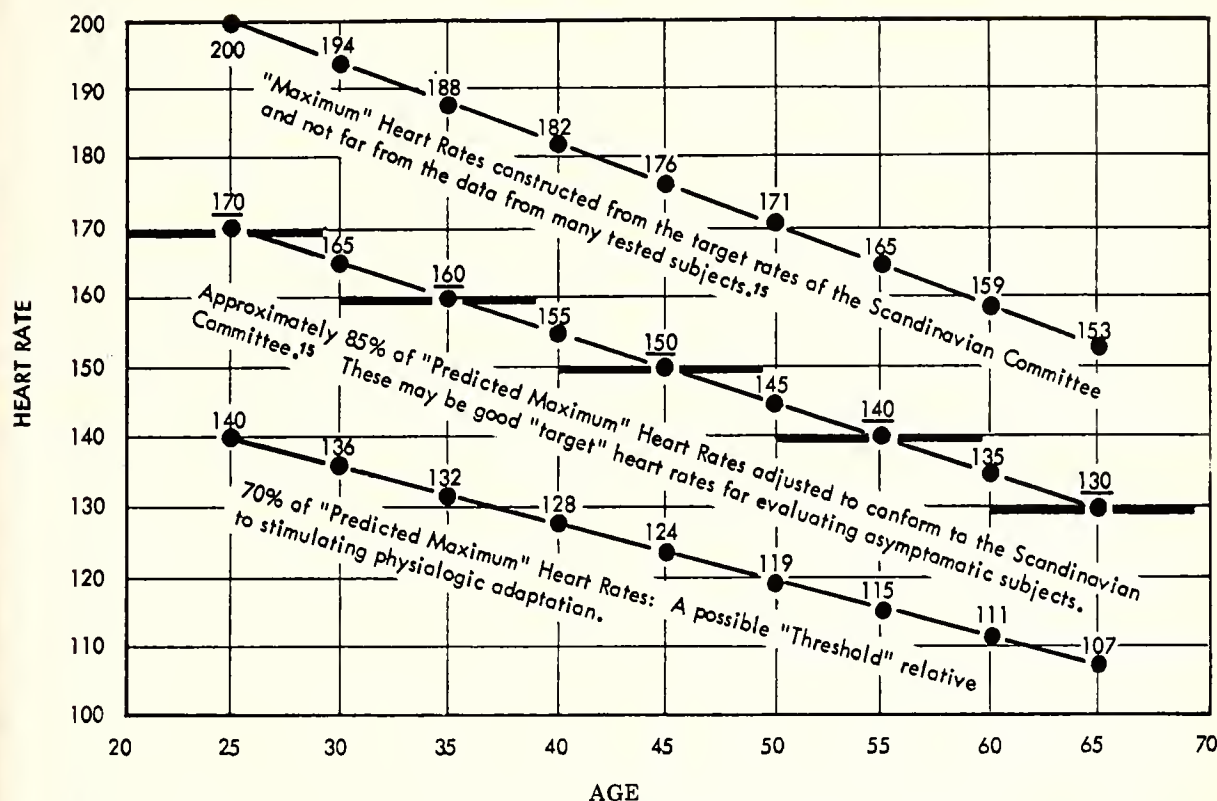


Fig. 1. Decline of "maximum" heart rate with age. Possible applications to exercise testing and training. (From Fox, S.M., and Haskell, W. L.: Proc Symposium on Rehabilitation and Testing of Physical Working Capacity, Fourth Asian-Pacific Congress of Cardiology, Tel-Aviv, September 1968.

Ashe⁴² make the following suggestions when exercising in hot environments.

1. Wear light, loose porous clothing.
2. Take adequate amounts of water and salt.
3. Exercise during the cool part of the day.
4. Allow at least two weeks for acclimatization.
5. Reduce work loads during periods of extreme thermal stress.

9. *Motivation* is a continual problem in training adults. Intermittent tests and variation of the training scheme will add stimulation to monotonous regimens. Combinations of cross-country running, circuit and interval training, with occasional basketball or handball sessions will help to maintain interest and enthusiasm in a program. We do not recommend continual plodding around a track.

10. *Calisthenics* should not be eliminated even though they are considered only supplemental to a cardiopulmonary training program. Proper muscle tone, posture, body

symmetry, and flexibility are important for optimal health, and the selection of a good calisthenics routine can contribute to this goal.

Exercise alone is not a panacea. Lack of proper sleep or nutrition, daily stresses at work and excessive smoking can off-set benefits derived from exercise. Exercise is only one of many important factors that can contribute to an optimally healthy individual.

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Health Manpower Crisis—Challenge And Response

JOHN A. D. COOPER, M.D.*

It is a real honor and privilege to participate in this very significant occasion in American medicine.

Anyone who has waited weeks for an appointment with an ophthalmologist is aware of the shortage of health personnel. The shortage is appreciated by those who have waited hours in pain for a doctor whose time was fully committed. However, it is recognized most by those who wait in vain for proper medical care. And this number is growing day by day.

The Crisis Defined

Fifty thousand additional physicians are needed for this country today. And even larger numbers of nurses and other personnel must be trained to fill out the health care team.

And it is a national problem.

However, it is a national problem that can be solved only by the response of individual institutions—institutions such as the Bowman Gray School of Medicine and the North Carolina Baptist Hospital. There are about 100 academic medical centers in this country and they must train all of the physicians and a significant percentage of the interns, residents, nurses, and technicians who assist these physicians.

But to speak about numbers of people is not enough—for it isn't people but the health services that most concern us.

Rapid changes are occurring in our society which pose very serious challenges for the health care establishment—challenges to bring the promise of medicine and of medical sciences to all segments of society. The call is for more health care of higher quality, better distributed through society, including the urban ghetto and the undoctored rural areas of our nation. And the call is getting louder and clearer every day.

It is apparent that traditional approaches to health care which have served us so well in the past are no longer adequate to meet the crisis which faces us today. Mere tinkering with the present system, mere replication of current methods, will not bring adequate care to those who now lack it.

The problem is very complex and obstinate for it is based on the larger problem of a dynamic ever-changing society. Bold innovations are going to be required if we are to achieve solutions—inovations not only in health services but to correct the other defects in society. I am reminded of H. L. Mencken's admonition that there are many simplistic solutions to very complex problems and all of them are probably wrong.

We cannot afford to wait for everything to be set right before we move ahead to meet the rising expectations and increasing effective demand for better health. We are in a very critical period of testing our voluntary health system. If it cannot meet the needs within its framework, alternative solutions may be imposed with the prospect of greatly increased control.

The kind of education and training that we provide for health care professionals will be a very important factor in the success of our response. The number and type of health professionals we educate and train is another important factor. But we also must devise more effective and efficient settings in which these health professionals can apply their knowledge and skills in meeting the health care needs.

Now this problem didn't just arise overnight. It has been forming, like the proverbial small cloud, for many years. The first formal national report calling attention to an impending shortage of physicians was published in 1958 (the so-called Bane Report). In that very same year, the faculty and staff of the Bowman Gray School of Medicine and the North Carolina Baptist Hospital scheduled a

*President of the Association of American Colleges.

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retreat to discuss the future role of these institutions in health education, research into the remaining mysteries of medical science, and patient care. It was then a very small cloud. Yet the staffs of these two institutions saw it looming and reacted to its appearance on the horizon, cognizant that it foreshadowed much more important things to come.

Other reports were to follow in rapid succession as the shape of the problem became clearer. And, as would be expected, most were numbers-oriented, for numbers are easy to demonstrate and handle. However, if one only talks of numbers, the problem may be poorly and incompletely understood.

I would like to illustrate the danger of mere numbers from the history of this medical school. The founding of Bowman Gray as a four-year school of medicine can be credited in part to a "doctor surplus." In 1931 there were 126 physicians for each 100,000 people in this country. In 1959, one year after the publication of this first report calling attention to the doctor shortage, this number had increased to 133 per 100,000.

Yet in the 1930s many organizations, including the one I now head, determined that there was a surplus of physicians. The depression created a lack of buying power that caused many physicians to be underemployed. One response to this surplus was the threatened closure of all two-year schools of medical science, such as the one then operated by Wake Forest College. The Wake Forest leadership, however, rose to the problem and expanded at this site as the price paid for its survival. It did survive and now is offering enlarged services to a nation coping with a doctor shortage.

Causes of Mounting Concern

What are the circumstances that have led us into our present dilemma? What is the evidence that all is not well with the health of our people? What has brought the mounting concerns about health manpower and questions about relevance of our education and training of health professionals?

For one thing, the data used to assess health status of people indicates that the United States doesn't rank very high among

the nations of the world. There are 21 other nations in which males and 9 in which females have a greater life expectancy at birth. We are outranked by the Scandinavian countries, Canada, France, England, and Wales among others, and our position has become less favorable over the years. The life expectation for males moved from 13th rank in 1959 to 22nd rank in 1965. We are the 18th nation in the world in infant mortality, with a rate of about 25 deaths per thousand live births. A white baby has twice the chance of celebrating his first birthday as a nonwhite baby. This depressing differential, however, does not explain our relative standing among nations. The rate for white infants still exceeds that for many countries with a lower standard of living as measured by economic factors and relative affluence. The same situation could be recounted for maternal mortality, where we also do not rank at the top.

The health care system is overloaded — overloaded because more people are seeking higher quality care more frequently. The population is increasing but, more importantly, the growth is greatest at the two ends of the life span where there is greater demand for medical services. Specialization increases the quality of medical care, but it reduces the ease of access to the physician. Then the ever-increasing urbanization of society further heightens demand. Larger personal disposable income, coupled with the growth of third-party payers for health services, which now includes the federal government, lowers the financial barriers to adequate medical care. And people are becoming more sophisticated about medicine and modern medical science through information in the mass media. They now recognize that they have more than a 50/50 chance of a favorable outcome with an encounter with a physician. They are asking that the latest scientific and technological advances be made available for the prevention, diagnosis, and treatment of all segments of society without regard for their socioeconomic status. And I think they are going to be satisfied with nothing less. Our deficit in health care is enormous. Twenty to forty million citizens are served inadequately. Although it is hard to convince the ghetto dweller that the problem is not confined to



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Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. There is no accepted proof that Flagyl is effective against other organisms and it should not be used in the treatment of other conditions. Exacerbation of moniliasis may occur.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, drowsiness, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous

eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, vaginal burning, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified.

Dosage and Administration: *In the Female.* One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male.* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

Dosage Forms: Oral tablets . . . 250 mg.
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*References available on request.

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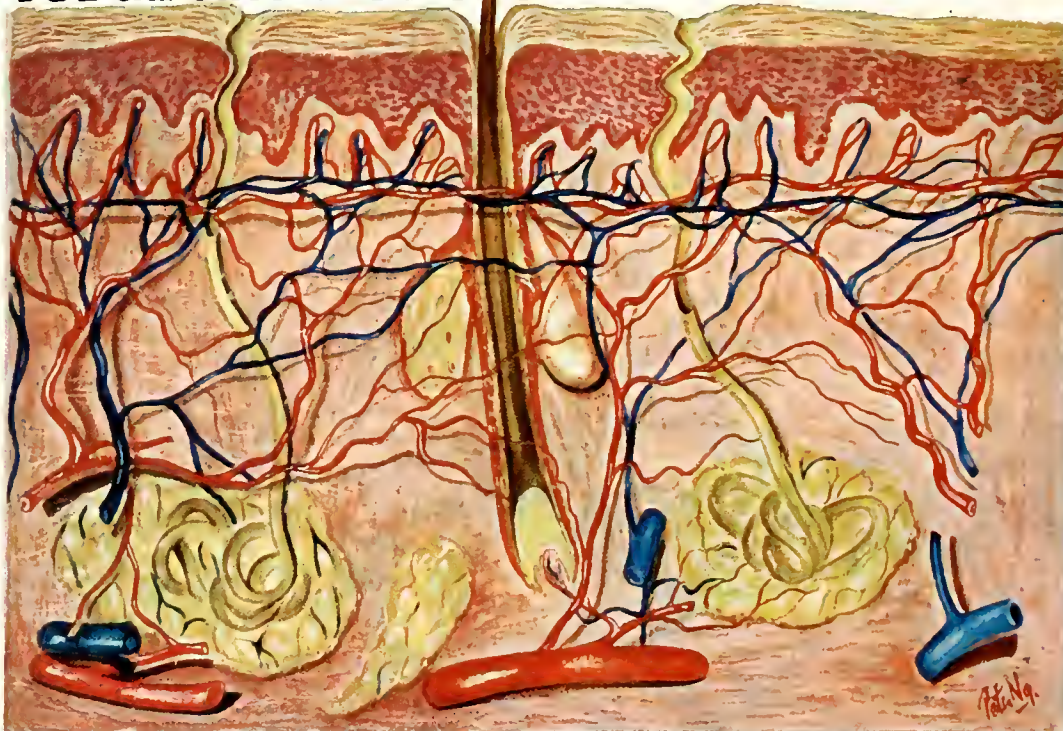
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his socioeconomic group, delivery of health care to the middle and upper social classes is beginning to encounter difficulties. Unfortunately in the press to meet immediate problems, short-range efforts are being stressed almost to the exclusion of long-range programs which are very critical for a more lasting solution. Major diseases will not be conquered until they can be attacked before the signs and symptoms appear, and we must clearly focus our attention on preventive rather than curative medicine.

For example, the federal programs Medicare and Medicaid will not provide payment for preventive medicine. But without more effective prevention of disease we may not be able to provide medical care for all, without regard to their means, within financial restraints and limitations of resources available to meet the need. And here research, a deferred health service, is very important, and unfortunately, it has fallen from grace in the federal establishment. In the recent "White House Report on Health Care Needs," which President Nixon released and Secretary Finch spoke about, biomedical research was not mentioned once. There is other evidence that the search for real answers to health problems has a low priority in our present administration. The effectiveness of research, however, in providing definitive methods of prevention, diagnosis, and treatment of disease is easily documentable. Immunization techniques and antibiotics have almost eliminated the diseases that ranked as the top killers at the beginning of the century. Pneumonia, poliomyelitis, diphtheria, whooping cough, and measles no longer take their tolls in death or maimed or crippled children. Without continuing efforts in biomedical research, we may be able to solve our immediate problems temporarily, but they will return with even greater ferocity to plague us in the future.

Although the ratio of physicians to population has kept pace with the increase in the number of people, and other health professionals have multiplied even more rapidly, they no longer meet the new parameters of demand which have appeared during the past decade. Thus, while our present dilemma can be attributed in part to an inadequate number of health professionals,

we cannot solve the problem by playing the numbers game alone.

The kind of health professionals we produce and the way they are trained are just as important as the number. The response to the national need by the Bowman Gray School of Medicine and North Carolina Baptist Hospital looks beyond the mere numbers required and attempts to deal with the kind of training problems as well as the numbers.

The Hanes Building, which we are dedicating, allows the school to increase its enrollment of medical students by 37 per cent. And teaching laboratories contained in the Hanes Building are making possible a new approach to medical education — an approach more relevant to the student's needs as he faces this ever-expanding body of medical knowledge.

The Division of Allied Health Programs, which is under the direction of Lee Powers, also has a new building which officially becomes a part of this institution today. Dr. Powers is experimenting with a new educational approach designed to train together the many health professionals who later will work together with the physician in patient care. The Division of Allied Health Programs has mounted a program to train a completely new type of health worker—the physician's assistant. With 100,000 of these people, we can greatly extend the physician's head and hands.

The School of Nursing is expanding its class size and experimenting with the increased use of audio-visual teaching techniques. Through a cooperative program with the Helene Fuld Health Foundation, more than a score of nursing schools will benefit from this experiment.

We also are here to dedicate the Charles H. Babcock Auditorium which will allow The Medical Center to expand greatly its contribution to the field of continuing education for those physicians already in practice. New knowledge is emerging from the libraries and laboratories of the academic medical centers at such a rate that a physician must continually refresh his knowledge if he is to remain competent and abreast of these advances. This will be done in this room and

from the very podium from which I speak today.

Thus, we are here today to dedicate buildings which will house new and expanded educational programs. We are also here to rededicate commitments made by this institution and the community which it serves. Without this commitment, the leaders of the medical school and the hospital would not have perceived the impending shortage of physicians, nurses, and other allied health workers and would not have started several years ago the plans whose culmination we are marking today. Just as the Medical Center has a commitment to serve this community, so has the community demonstrated a commitment to this institution.

More than \$30,000,000 will be invested in the facilities which we dedicate and the

hospital addition which is now under construction. More than \$8,000,000 of that sum came from farsighted business, industry, and individuals in Forsyth County. Society is indebted to them for their contributions that will help make life more meaningful and dignified for so many people.

These actions amply demonstrate that the Medical Center came home when, in 1941, it was forced in response to that year's challenge to leave Wake Forest and seek new surroundings.

With the help of many here with us today, this institution rose to meet the present challenge and helped assure that the needs of society were to be met. The rest of the nation can look here for an example to follow. I know of no better.

Experience With Inguinal Hernia Infants And Children

THOMAS G. HARDY, M.D. and ADOLPHA A. ANDRADA, M.D.*

Since Rothenberg and Barnett,^{1,2} in 1955, recommended bilateral inguinal exploration in infants and children undergoing unilateral herniorrhaphy, the issue has continued to be controversial. For this reason the experience with inguinal hernia in infants and children at Forsyth Memorial Hospital was reviewed.

Material

Three hundred fifty-five patients with inguinal hernia including newborn infants to children six years of age were admitted to Forsyth Memorial Hospital from 1962 to 1969.

There were 204 patients with right inguinal hernia, 104 with left inguinal hernia, and 47 with bilateral hernias. One hundred fifty-six of the patients were male, 48 female, and there was no significant difference between the sexes in the relative frequency of right,

left, and bilateral hernia in the series (Table 1).

Surgical treatment consisted of right inguinal herniorrhaphy in 190 cases, left inguinal herniorrhaphy in 89 cases, and bilateral herniorrhaphy in 76 cases (Table 2). Fourteen patients with right inguinal hernia and 15 patients with left inguinal hernia had bilateral explorations at the time of the initial operation (Table 3). All bilateral explorations were performed on males. Various types of repairs were employed, including simple herniotomy, Ferguson's herniorrhaphy, and more extensive repair as indicated.

Results

There were no known recurrences in the patients treated. Thirty patients returned for operation for hernia occurring on the opposite side at a later date. Twenty had previously undergone repair on the right; ten, on the left. There were no deaths.

*Reprint requests to 621 Glen Echo Trail, Winston-Salem, N. C. 27106.

Former resident in surgery at Forsyth Memorial Hospital, Winston-Salem.

Table 1

Patients Admitted with Inguinal Hernia (Newborn to Age Six)			
Site of Lesion	No. of Patients		
	Male	Female	Total
Right	173	31	204
Left	91	13	104
Bilateral	43	4	47
			355

Comment

Right inguinal hernia was present in 57% of the patients in the series, left inguinal hernia in 29%, and bilateral hernia in 13%. These figures correspond with other series reported.³

Twenty-nine (9%) of the patients with unilateral hernia underwent exploration on the opposite side; hernia sacs were found in 24. Thus 83% of the contralateral exploratory operations performed were positive. The percentage of positive contralateral explorations was approximately equal in right and left-sided hernia.

Seven per cent of the patients with right inguinal hernia had exploration on the left, and 14% of those with left inguinal hernia had exploration on the right. Eleven per cent of the patients undergoing right herniorrhaphy returned for operation on the left, and an equal percentage of patients having left inguinal herniorrhaphy returned for operation on the right.

The larger number of bilateral explorations in patients admitted with left inguinal hernia as compared with those in patients admitted with hernia on the right supports previous evidence that bilateral hernia is more common in patients presenting with left inguinal hernia than in those presenting with a hernia on the right.^{3,4}

Combining the number of positive contralateral explorations with the number of hernias developing subsequently on the opposite side gives a total of 54 or 18% of the 308 patients admitted initially with unilateral hernia who also had a hernia on the contralateral side. These included 32 of the 204 patients admitted with right inguinal hernia (16%) and 22 of 104 (22%) of those admitted with left inguinal hernia.

Table 2

Procedures Performed			
Procedure	No. of Patients		
	Male	Female	Total
Right herniorrhaphy	159	31	190
Left herniorrhaphy	76	13	89
Bilateral herniorrhaphy	72	4	76
			355

Table 3

Patients Requiring Subsequent Repair

On the Opposite Side

Primary Hernia	No. of Patients		
	Male	Female	Total
Right	17	3	20
Left	8	2	10

Table 4

Bilateral Explorations

Primary Hernia	No. Cases*	No. Positive
Right	14	12
Left	15	12

*All patients were male

Discussion

The debate regarding contralateral exploration of the inguinal canal in unilateral hernia continues. Proponents and opponents of bilateral exploration, however, agree that a contralateral hernia will occur later in 20% to 80% of patients having unilateral repair. They also agree that a contralateral hernia is found in 50% to 80% of the patients who undergo contralateral exploration.^{6,7}

The discrepancy between the incidence of contralateral hernia occurring at a later date and the percentage of positive contralateral explorations may be explained by some evidence that a patent processus vaginalis will close within the first two years of life, and that some are never associated with a hernia. Moreover, in some cases, what appears to be a small hernia sac may be parietal peritoneum delivered into the inguinal canal during exploration.⁶

Experience at Forsyth Memorial Hospital is in general agreement with that reported by

others. Our series encompasses various surgical approaches including unilateral repair, bilateral exploration in patients with a thickened spermatic cord, bilateral exploration in patients with hernia on the left, and routine exploration. As is evident from the data, the majority of surgeons at this hospital perform a unilateral operation on both males and females.

The authors concur with this approach, feeling that the development of a contralateral hernia in 20 to 25 per cent of reported cases is an acceptable percentage of cases requiring a second operation.^{6,8} Experience at Forsyth Memorial Hospital shows that 11% of herniorrhaphy patients admitted from 1962 to 1969 encompassing newborns to children 6 years of age required a contralateral operation. A relatively short follow-up, as well as the possibility that some of our patients are operated on elsewhere, accounts for the relatively low rate of contralateral operations.

Summary

1. Three hundred fifty-five patients with inguinal hernia, ranging in age from birth to six years of age, were encountered at Forsyth Memorial Hospital from 1962 to 1969.
2. Two hundred four patients were admitted with right inguinal hernia, 104 with left inguinal hernia, and 47 with bilateral hernia.
3. Surgical treatment included right inguinal herniorrhaphies in 190 cases, left hernia repair in 89 cases, and bilateral procedures in 76 cases.
4. Twenty-seven (9%) of the patients with unilateral hernia underwent exploration of the contralateral inguinal canal.
5. The surgical techniques employed were simple herniotomy, Ferguson herniorrhaphy, or a more extensive repair as indicated.
6. There was no known recurrence. Eleven per cent of the patients undergoing unilateral herniorrhaphy required herniorrhaphy on the opposite side at a later date; the percentage for right and left hernia was the same. This figure is lower than the 20 to 25 per cent reported in the literature because of the relatively short follow-up and the possibility that some patients have been operated on elsewhere.
7. Since only one out of four or five patients with a unilateral hernia can be expected to have a hernia subsequently on the opposite side, the additional time and risk involved in an initial bilateral exploration does not seem justified.

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Amniotic Fluid Analysis In Erythroblastosis

JOHN P. GUSDON, JR., M. D. and NORMAN H. LEAKE, Ph. D.

Erythroblastosis fetalis is a major cause of perinatal mortality, occurring in about 1% of live births.¹ The administration of anti-D within 72 hours of the time of birth of a D-positive infant to a D-negative mother who is not yet sensitized to this antigen has been shown to be an effective method of preventing sensitization.² It has been suggested that with the advent of this method of treatment, the disease would soon disappear. It is, however, quite likely that erythroblastosis will continue to be a problem for some time.

First of all, although the antibody to D antigen is responsible for the majority of the clinical cases of erythroblastosis that we see, there are a multitude of other red blood cell antigens which may result in the disease if they are present in fetal but not maternal red blood cells. The techniques concerning the management of the disease which we will discuss are applicable to erythroblastosis caused by any of these antigens. At one time it was a common practice for the physician to inject children with several milliliters of blood as a protective mechanism against infectious diseases.³ This practice has fortunately been discarded. It was a significant cause of immunization, since it has been shown that, in many instances, as little as 0.1 ml is sufficient to cause sensitization.³ Sensitization of women as a result of mismatched blood transfusion will occur. Patients have become primarily sensitized to red blood cell antigens present in transfused blood. Later, in pregnancy, if the fetal red blood cells have this same antigen, a secondary immunologic response occurs and erythroblastosis ensues. In addition, even though infants no longer receive injections of blood to boost their resistance to infectious diseases, they may still be sensitized before birth. A study by Taylor⁴ has shown that D-negative infants may have been sensitized in utero as a result of the transplacental passage of maternal D-positive

blood into their circulation. Some women become sensitized during their first pregnancy as a result of transplacental passage of incompatible fetal blood. So, in these instances, we will continue to be faced with a sensitized patient.

During the past several years we have assisted other physicians or been primarily responsible for the management of several hundred cases of erythroblastosis. A brief outline of our management of these cases follows.

Antepartum Care

1. A careful obstetric history, noting particularly whether or not the patient has had prior blood transfusions, ectopic pregnancies, miscarriages, or affected infants. Patients have been shown to become sensitized following some ectopic pregnancies or miscarriages. It behooves the physician to obtain an antibody screening test on any patient who gives a history of transfusions or a fetal demise of unknown cause.⁵ If an antibody is found, the father's blood should be tested for the presence of the antigen.
2. Careful determination of the last menstrual period and comparison with clinical evaluation of the length of gestation.
3. Determination of the patient's blood type (ABO and Rh).
4. Documentation of normal fetal development, paying particular attention to signs which may portend a poor prognosis—i. e., the development of pre-eclampsia, increased fetal activity, or hydramnios.
5. We obtain an antibody screening test at the 20th week of gestation in all Rh-negative patients. If an antibody is present, the specific antigen is determined, and the father's blood is tested for the antigen. Prior to this time there appears to be little that we can do to ameliorate the disease, and further

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management of the patient will depend upon the past history and the titer obtained. The patient is tested again for the presence of an antibody at the 28th and 35th weeks of gestation if the preceding tests are negative.

Once we have determined that the patient does have an antibody, we no longer attempt to follow the course of the disease in the infant by means of the maternal titers. These have been shown to correlate poorly with the degree of severity of erythroblastosis,¹ and spectrophotometric analysis of the amniotic fluid is a far more accurate method of assessing the extent of the disease process.

Amniotic Fluid Analysis

If the past history indicates either a stillborn or an infant who requires two or more exchange transfusions, the first amniocentesis is done at about the 25th week of gestation. If the history is less grave, we do the first amniocentesis at about the 28th week of gestation. Thereafter these procedures are repeated every 10 to 14 days, since the prognostic significance of our analysis is not effective for a longer period. The method of performing an amniocentesis has been well described.⁶

This method of predicting the status of the affected infant in utero by measuring "bilirubin-like" pigments was first devised by Bevis^{7,8} and later modifications and refinements have been added by Liley,⁹ Freda,⁶ and others.

A modification of both Liley's and Freda's methods have been incorporated into a single chart which we use to assist us in evaluating the status of the fetus (Fig. 1). To obtain the difference in optical density (OD) at 450 millimicrons to apply to this chart, the amniotic fluids are handled in the following manner. After centrifugation at 1000 G for 10 minutes, the amniotic fluid supernate is passed through 0.22 micron filter paper* and then analyzed on a Beckman DB Spectrophotometer, using distilled water as a blank. Starting at 650 millimicrons, a continuous automatic recording of the per cent transmission is linearly recorded on an L & N Speedomax type G recorder. The difference at 450 millimicrons between the observed

AMNIOCENTESIS RECORD

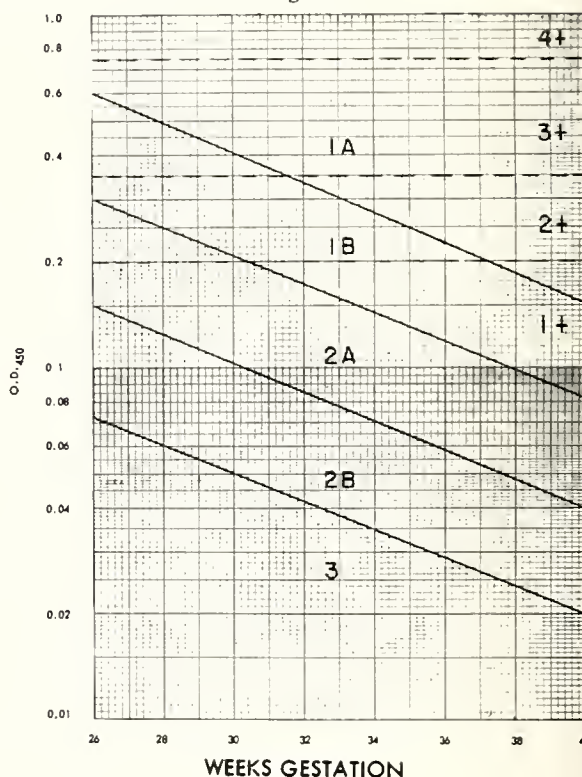
Liley's criteria

- 1A Immediate transfusion or delivery.
- 1B Transfusion or delivery urgent.
Hgb. less than 8 gm.
- 2A Delivery at 35 to 37 weeks.
Hgb. 8 to 10 gm.
- 2B Delivery at 37 to 39 weeks.
Hgb. 11 to 14 gm.
- 3 Delivery at term. Not anemic.

Freda's criteria

- 4+ Death imminent. Transfuse or delivery immediately.
- 3+ Death within 3 weeks. Transfuse or deliver soon.
- 2+ Survival at least 7 to 10 days. Repeat test.
- 1+ No immediate danger.

Fig. 1



optical density and that of the hypothetical baseline, made by drawing a tangent to the tracing at each end of the spectrum, is calculated by taking the logarithm of the ratio of the per cent transmission of the baseline to that of the spectrophotometric tracing at 450 millimicrons (Fig. 2). This value is then

applied to the composite of Freda's and Liley's chart (Fig. 1).

Another factor which we have used extensively is the ratio of the per cent transmission at 520 to 490 millimicrons. The per cent transmission at these two wave lengths is read directly from the spectrophotometer, using a curvette of a 1-cm light path. This ratio was determined to be a more effective measure of the effect of the disease on the fetal outcome by Knox *et al.*, who used a 0.5-cm light path. In order to compensate for the difference in light paths, we use the square root of the value obtained. We have recently confirmed that this value is the single most significant prognostic parameter of the fetal outcome.¹¹ If the value is 1.1 or greater, there is a great likelihood that

the infant will die if allowed to go to term. In this study we found a correlation coefficient of 0.735 to the relative status of the infant at the time of birth, while the OD difference at 450 millimicrons gave a correlation coefficient of 0.723.

These figures are indicative of the ability of these methods to differentiate between precise grades of outcome. A definite prenatal prognosis on a less selective basis—that is, affected or unaffected without gradation of the degree of severity of the disease—can be obtained by the use of spectrophotometric analysis of amniotic fluid in 96% of all cases.¹² Very heavily stained amniotic fluids are effectively handled by simply diluting the amniotic fluid with distilled water, after processing as previously described, to a point

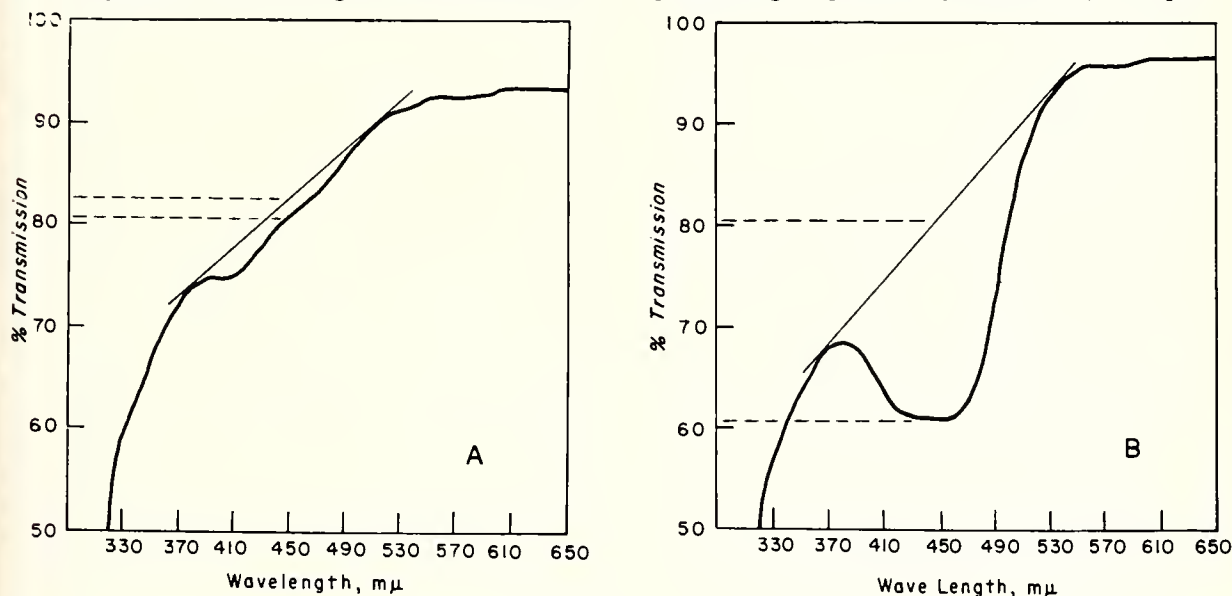


Figure 2

The difference in optical density at 450 mμ ($\Delta O.D. 450$) is represented by the difference between the per cent transmission observed for the amniotic fluid and that of the hypothetical baseline, and is calculated from the expression $\Delta O.D. 450 = \frac{\text{baseline \% T}}{\text{observed \% T}}$. In patient A above, who is in the

34th week of gestation $\Delta O.D. 450 = \log \frac{82.8}{80.8} = 0.01$, indicating an unaf-

ected fetus. This was substantiated at birth at term. In patient B, in the 33rd week of gestation, $\Delta O.D. 450 = \log \frac{80.5}{60.9} = 0.12$.

The fetus was in Zone 2A on the Liley diagram, and consequently was delivered by cesarean section at 37 1/2 weeks gestation. One exchange transfusion was required.

where an effective scan can be made. To compensate for the dilution, the per cent transmission between 520 and 490 millimicrons is raised to the power of the reciprocal of the concentration of the amniotic fluid. The square root of this value is then used. The OD difference at 450 is simply multiplied by the reciprocal of the concentration of the amniotic fluid. When this situation is met, we will often further assess the extent of fetal deterioration by obtaining an amniogram. This is done by introducing a radiopaque material into the amniotic fluid. After three hours a flat plate of the abdomen enables us to determine if the fetus is sufficiently viable to have swallowed the amniotic fluid. It will also indicate the degree of fetal edema, fetal abdominal distention, and other characteristics of the pregnancy. This methodology and examples are well outlined by Queenan *et al*, and it is a useful adjunct in diagnosis.¹³

The obvious reason for determining the degree to which the fetus is affected is to enable us to leave the infant in utero as long as possible so as to avoid the effects of prematurity. This advantage, however, must be balanced against the increasing severity of the disease process as the pregnancy progresses. We know that the antibody fraction in which the destructive ability resides in this disease process is immunoglobulin G. It has been shown to be passively transferred very early from the mother into the fetus, and reaches maternal levels by the 31st to the 33rd week of gestation.¹⁴

Freda has suggested induction of labor at term (when it is fairly certain that the pregnancy has progressed 38 weeks or more according to dates and the estimated fetal weight is 2,500 gm or more) for two reasons: (1) to prevent those fetal deaths which might occur between 38 weeks of gestation and spontaneous labor at 40 weeks or later, and (2) to alert the pediatric staff for a possible exchange transfusion and allow the blood bank ample time to have fresh compatible blood available.⁶ However, if there is doubt about the maturity of the fetus and its status is not critical as determined by the amniotic fluid analysis, it is then probably wiser not to interfere.

When an analysis of the situation warrants early delivery, induction of labor is undertaken with a constant infusion of oxytocin, monitored continuously. Once the decision to deliver has been made, if the patient has not made progress by the second day of induction, following surgical rupture of the membranes for less than 24 hours, the baby is delivered by cesarean section.

The utilization of these methods has resulted in a decrease in perinatal mortality from 22% to 9%, and the use of intrauterine transfusions has reduced the figure to about 5%.³ Although we have had occasion to utilize intrauterine transfusions, this procedure will not be discussed in this paper except to say that it is not done after the 32nd week of gestation. We would like to make a plea, though, that the status of the disease be determined early enough to allow this method to be used, if necessary.

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Moliere And Medicine

S. CHARLES BEAN, M. D.

The theatre, like any form of art, is delicately interwoven with the history of the artist and the social milieu from which it arose. Moliere's *The Imaginary Invalid*, which was performed in Paris on February 10, 1673¹, is a striking example of the inseparability of the artist and his world from the work of art. This comedy-ballet provides insight into Moliere's own personal dilemma - his chronic tuberculosis - and provides a view of seventeenth century medicine. Both insights are aptly introduced by a section from the Alternative Prologue of *The Imaginary Invalid*:

Vain and foolish doctors you
Have no balm can cure my ills.
Nor your jargon, nor your skills
can relieve my heart's despair.

All the remedies of which you boast
and claim to know the uses
For my ease can nought avail;
Your foolish jargon can prevail only
with imagined ills;
For all the rest they are invalid
Hocus, pocus, sheer abuses
How soe'er you boast their uses!²

Moliere's plays were concerned with unmasking falsehood and liberating man's mind from the slavery of illusion. Human frailty, which leads men to unfounded dependence on the irrational, is gaily exposed in the artist's plays. Yet, Moliere was able to use his art as an instrument of corrective punishment, while his audience laughed at their own folly. *The Imaginary Invalid* is true to this tradition. In this comedy-ballet, Moliere inspects and laughs at his own frailty arising from his chronic illness—a frailty every ill person displays as he seeks succor even when none is available. Moliere projects himself on the stage as two contrasted personalities — Argan (the imaginary invalid who represents that part of Moliere's wish to believe in illusions of physician's power) and Beroalde (Argan's brother, who is the spokesman for Moliere's rational). It is through Moliere's view of his own medical crisis that

the twentieth century physician can peek at his not so distant seventeenth century "brother" of the profession.

A survey of Moliere's life, especially of his encounter with medicine, and some observations of seventeenth century medicine itself, substantiates the caustic, but comic, attitude displayed in this and other plays as something more than just comedy empty of a significant message. Moliere was aware of his illness and the usual folly of the pedantic, formalistic approach to illness held by his contemporary physicians. Afflicted by "a spasmodic cough and pulmonary attacks," the actor-playwright was often melancholy, morose, and timid off stage³—a personality not unlikely in one suffering from tuberculosis.

Moliere, the first-born of a wealthy family of Parisian bourgeois, was first seriously hindered by his consumption in December of 1665, when he was forced to halt the performance of *L'Amour Medicine* in order to recuperate. The temper of his illness continually worsened, and the very next year the artist faced another medical crisis which forced him "to upwards of two months in bed".³ Although no reference to treatment other than rest was made by any available sources, it seems reasonable that if any therapy were applied it served only to infuriate the artist as it did not improve Moliere's condition. Despite "a racking cough that never left him a day of peace," Moliere continued to pen his art. In this state of declining health he wrote *The Imaginary Invalid*. The motivation for this probably developed from his own situation and possibly was stimulated by a rival playwright's *E'lomer Hypochondre*, which lampooned Moliere for "imagining" he was in the throes of consumption.² Moliere probably turned his laughter inward at the spectacle of his own human frailty.

The artist was additionally saddened by the death of his only grandson and lifelong theatrical companion, Madeline Bejart, in 1672. Only two members of his original theatrical troop still lived at this time, and he believed that physicians had killed his only son (ten days after birth) and a beloved

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friend, Le Mothe Le Vayer, with the new wonder drug-antimony.^{3/4} Certainly these experiences did not cultivate a warm attitude toward contemporary physicians and their boasts of cures. And certainly his comedy is not just a literary device unrelated to real attitudes as so many literary critics suggest.⁵

By exploring *The Imaginary Invalid* and other sources, it is possible to get a better understanding of Moliere's viewpoint in light of what medicine was actually like in the seventeenth century. Moliere personified doctors in Diaforius's son, Thomas, in the play. Thomas is described as a "great booby newly graduated from the [medical] schools." The neophyte physician is depicted by his own father in rather amusing terms: Thomas "has never shown the lively imagination or the sparkling wit one observes in some young men . . . We had the greatest difficulty in teaching him to read." But the real "virtue" displayed by Thomas is the very epitome of Moliere's objection to the conservative Faculty of Medicine in Paris:

Firm in dispute, a very Turk in defense of a principle, he never changes his opinion and pursues his argument to the logic limit . . . his unswerving attachment to the opinions of the ancient authorities and his refusal ever to attempt to understand or even to listen to the arguments in favor of such alleged discoveries of our own times as the circulation of blood.

Caustic as this judgment is, Moliere fails to salt doctors' wounds when he states later in the play that it is not doctors themselves he makes fun of, but the absurdities of medical science.

The historical description of the seventeenth century French internist by William MacMichael certainly paints an image other than that of a "great booby." The internist wore a silk coat, breeches and stockings, buckled shoes, lace ruffles, and full-bottomed wig. He made his house calls on horseback, sitting sideways as a woman. Internists also carried a long cane with a knob often held to the nose to ward off noxious vapors from the sick room.⁶

The extreme conservatism of the Faculty of Medicine particularly annoyed Moliere. Progress, experimentation, and common sense were typically ignored by the leaders of

medicine in favor of socratic, pedantic, and unyielding formalism. Although certain objective features of disease were known and careful observation had begun to be cultivated, seventeenth century medicine was ravaged by numerous theories, schools, and systems from iatromechanics to humoralism. Much thought still rested on the classical founders of the profession. Berolde's description of M. Purgon alludes to this pedantic formalism:

He's a doctor through and through, a man with more faith in his rules than anything capable of mathematical proof . . . Medicine has no obscurities for him, no doubts, no difficulties. Full of headlong prejudice, unshakable self-confidence, and no more common sense and reasoning than a brute beast he goes on his way purging and bleeding at random and hesitates at nothing.⁷

It is notable that although theories were numerous, diagnostic aids were few—the pulse examination and uroscopy.

John Earl, the Physician and Bishop of Salisbury (1601-1665) expressed a similar view when he accused the doctor of being "sworn to Galen and Hippocrates though he has never seen them."⁸

Since illness was commonly viewed as failure to retain proper proportions of body humors — bile, atrabile, blood, and phylegm — therapy was aimed at removing excesses of these elements. The armament against disease consisted of the enema, the purge, and bleeding. In the mock comedy-ballet at the conclusion of *The Imaginary Invalid*, Moliere questions the rationale of using these measures for all varieties of illness. In bogus Latin, Argan gives the formalized therapy for a number of diseases:

Clisterium donare
postea bleedare
afterwards purgare.
Rebleedare, repurgare,
and reclysterisare.

As evident in Moliere's personal history, he sincerely doubted any man's ability to cure another. In the play Berolde contends further that his hypochondriac brother cannot be sick as Argan is still alive despite all the medicines he took. "Most men die of their remedies not their disease."⁹ Moliere even has the physician, Diaforius support his argument in the play: "The trouble about people of consequence is that when they're ill they

absolutely insist on being cured.”² After all, in the seventeenth century it was the patient’s responsibility to get better and not the doctor’s.

That seemingly anally oriented French society was quite fond of the purge and enema. Three or four daily enemas or “lavements” were considered necessary for well-being. Women especially relied on the method to purify and whiten their complexion. King Louis IV (1638-1715), the Sun King of France, was addicted to the procedure. He received over two thousand internal washings during his life. When DeGraaf described the first self-administering clyster in 1668, the enema actually became a do-it-yourself home remedy. It is not difficult to understand why Moliere dubbed the century the “age of clysters.”⁷

Argan’s apothecary bills describe some of the delightful medications used orally and anally to bring proper proportions to the humours.

A good detergent injection compounded of a double catholicon, rhubarb, mel rosatum . . . to flush, irrigate, and thoroughly clean out the gentleman’s lower intestine . . . a hepatic, soporific and somniferous julep to induce the gentleman sleep . . . a sound purgative and stimulant concoction of fresh cassia with Levantine senna to expel and evacuate a gentleman’s bile.²

Although a number of useful drugs such as cinchona and antimony were used, medication was frequently exotic and of little proved effectiveness. Such remedies as salt of wood lice and earthworms used for gout and oil of ants to cure deafness were at least repulsive if not effective.¹

Even though the exercise of bleeding came under some attack in the seventeenth century, it was widely and often fatally practiced. Guy Patin (1601-1672), Dean of Faculty of Medicine in Paris, was an ardent believer in venisection as a panacea. He proudly described his cure, “as if by a miracle,” of a 7-year-old boy with pleurisy, whom he bled 13 times in 15 days.⁶ The Faculty taught that the body contained 24 liters of blood and that 20 of these could easily be removed without endangering life. With this foundation of “fact,” bleeding was liberally practiced. The lack of common sense in the use of this treatment is more than hinted at in Mme.

de Seigne’s letter about the death of M. de Montul:

He was severely bled; he wanted to resist the last time, that was the eleventh, but the doctor won: he said that he gave way to them and they wished him to die according to the rules.

It is certain that Mother Church also doubted the ability of physicians to cure, as the physician was required to instruct a patient to confess to a priest if it became necessary for three medical visits.¹

The Imaginary Invalid has more significance to the life of Moliere than just an expression of his attitude on medicine. The play was his epitaph. While playing the role of Argan during the play’s fourth performance on February 17, 1673, Moliere was “seized with a fit of coughing and broke a blood vessel.” He was carried to his home in the Rue de Richelieu, and there ceased his persistent coughing forever. Excommunicated from the church, as all actors were, no priest would administer last rights to the dying playwright. Only two nuns and some close friends were at Moliere’s bedside as he acted out his final scene of life. Significantly, no physician was present.

One cannot help feeling that Moliere’s projection of his own name into Act III of *The Imaginary Invalid* signifies his epitaph. Argan complains about Moliere’s mockery of respectable doctors in many of his plays:

If he were ill I wouldn’t help him though he were at death’s door. He wouldn’t get the slightest bleeding or the smallest injection however much he begged and prayed for ‘em. “Die and be damned,” I’d say, “and that’ll teach you to make fun of the doctors!”

Berolde answers his brother simply: “He’ll [Moliere] be wiser than the doctors and not ask them for help.” Berolde’s reason for this decision has been echoed throughout the whole comedy:

. . . only the strongest and most vigorous men can stand up to malady and medicine at the same time and that so far as he [Moliere] is concerned, it’s as much as he can do to bear his own illness.²

It is interesting to speculate that Moliere realized he was close to death and decided to use his play as a parting message to his audience. Certainly his own personal tragedy was sublimated in laughter in *The Imaginary Invalid*, as is possible only with the talent of a great artist.

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JIM BARNES - A SKILLED AND DEVOTED GUIDE

It is right and fitting that the Medical Society of the State of North Carolina pay homage to a man who has literally breathed life into it. To a great extent, the very existence of the Society today is due to the tireless efforts of Jim Barnes. Those of us who have had the privilege of working with Jim for many years appreciate the knowledgeable and intelligent approach he brought to the innumerable problems that constantly arose as the destiny of the entire Society was shaped. We can affirm that the *Journal* could hardly have existed without his guiding hand.

It is with pleasure that the Editorial Board presents, in this issue, two items in tribute to this man. On page 236 appears a resolution that was duly passed by the House of Delegates, and on page 246 is a summary of the *Journal* budget for 1969. Indeed the budget summary may be as great a tribute to his devotion to the Medical Society and his astuteness and skill in directing its financial affairs as is the resolution.

One word on the budget summary: The cost to the individual member includes the *Roster*, the *Transactions*, and the *Public Relations Bulletin* as well as the *Journal*. On first inspection the cold figures may not seem an appropriate tribute to Jim, but further reflection makes it apparent that this report speaks of his careful management and business acumen in terms that are loud and clear.

The Editorial Board thanks you, Jim, for making possible the various publications of the Society and for the encouragement you have given its endeavors.

William McN. Nicholson, M.D.

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ALCOHOL AND CIRRHOSIS

In 1949 Best, Hartroft and coworkers told how choline would prevent liver damage in rats fed alcohol or sucrose.¹ The findings of this influential group helped form the widely held opinion that the amount of alcohol a person drank was not too important in producing liver disease if he also ate an adequate diet. However, doubts have remained, for epidemiologic studies show that the incidence of cirrhosis parallels the amount of alcohol consumed in a given population, and clinical experience clearly shows that most cirrhotics are heavy drinkers, and not always the sort who do not eat while drinking. Since cirrhosis of the liver is among the top 10 causes of death in all age groups, both nationally and here in North Carolina, and ranks 7th or 8th in the 25-64 age group, it is an ailment which all physicians must take seriously.

During the last few years the studies of Lieber and his co-workers, indicating a direct

toxic effect of alcohol on liver cells, have stirred the fears of physicians and confirmed the prejudices of puritans. The theme emerging from their many papers is that ethanol, in amounts "that did not cause inebriation and are commonly consumed by many so-called social drinkers,"² produces a fat accumulation in the liver. Even in volunteer subjects who were not alcoholics and ate a more-than-adequate diet, administration of ethanol in the amounts they classified as common among some social drinkers was followed by such ultrastructural changes as cytoplasmic lipid droplets, enlargement and distortion of mitochondria, increased smooth endoplasmic reticulum, irregularity of rough endoplasmic reticulum and occasionally focal cytoplasmic "degradation."³ The amount of alcohol given to these nonalcoholic volunteers varied according to the particular dietary regimen, ranging from a low of 68-130 grams per day, to a high of 270 grams a day, corresponding to 7-13 and 27 ounces of 86 proof whiskey per day. In some instances the ethanol was given as an isocaloric substitute for carbohydrates, in others as a supplement to a basically adequate diet. In each dietary setting the retrogressive changes mentioned made their appearances. Blood alcohol levels averaged about 50 mg per 100 ml, and there were none of the usual signs of frank intoxication. Lieber's group has done other, similar experiments on alcoholics maintained in metabolic wards and given as much as the equivalent of 40 ounces of whiskey per day, obtaining similar effects. It seems that this group has shown beyond reasonable doubt that a perfectly adequate diet—ideal in terms of high-protein, low-fat, vitamin and lipotrope content - will not protect against a toxic effect of alcohol as given in their studies. Similar results occur when rats are given alcohol in a liquid diet, which is the only way they can be induced to take enough alcohol to produce the desired effect.

Supplementing Lieber's studies are the careful studies of Lelbach,⁴ who studied a population of male alcoholics who were voluntary patients in a sanitarium, and were clinically well. His 320 men had various liver function tests and liver biopsies, as well as thorough clinical study. He showed that liver

biopsy indicated damage to that organ more often than liver function tests did, and only 5 of 39 men with cirrhosis had had the diagnosis made. There seemed to be a dividing line at 160 grams of alcohol per day between those with serious liver disease and those without it, a level confirmed by other studies. Although duration of intake also had a bearing on the occurrence of liver disease, the amount of alcohol drunk was most important. Lelbach suggests that the "magic" line of 160 gm (180 gm/day according to others) represents that amount of alcohol that can be metabolized each day by the limited capacity of the liver, and that once the mechanism is saturated, alcohol begins to produce the permanent damage so much to be feared.

Several questions come to mind. First, Lieber's group (and their critics) are quick to state that there is a missing link between the degenerative changes they observe in liver cells and portal cirrhosis. They suggest that the necrosis observed in livers from people with acute alcoholic hepatitis may be the finding in question, since it could be followed by the inflammation, lobular coalescence and fibrosis which characterize cirrhosis. Clinicians will affirm that there must be some explanation to account for the failure of 11 out of 12 alcoholics to develop cirrhosis, to say nothing of social drinkers. The lore of the wards would cast suspicion that there is some hereditary predisposition, for multiple cases in families have been seen, and despite the fact that such occurrences might reflect environment rather than heredity, the suspicion remains. As Lelbach suggests, predisposition might consist of decreased ability to metabolize alcohol. It may also be that the liver cell damage which apparently quite regularly follows alcohol drinking is converted to cirrhosis by a separate mechanism such as an intestinal mucosa which allows toxic substances or viruses to pass through it; this remains for future research. Or is the nutritional theory really dead? Lieber's experiments are short-term, lasting a few days to a few weeks. Cirrhosis probably requires 10-15 years to develop, and no animal experiments of like term have been reported. In that span of a human life countless environmental events might occur to influence the development of cirrhosis,

including infections and exposures to toxins. It is well known that alcohol potentiates the toxic effects of carbon tetrachloride, and one wonders if something less obviously hepatotoxic might also have ill effects on a liver already damaged by alcohol, especially operating over a period of years. In recent remarks, Hartroft⁵ also seems to ask if all nutritional effects have been properly evaluated. He proposes that what he calls, with his usual flair for the felicitous, the "executive drinker," might have a number of different patterns of taking in his usual 9 ounces of alcohol per day, some of them adding alcohol calories to total calories, others substituting alcohol calories for those of such essential nutrients as proteins. In such circumstances our executive drinker might have a protein intake at times very low, and thus add to the alcohol effects yet another insult. Clearly a lot remains to be observed and to be worked upon experimentally.

With liquor the favorite environmental toxin of our society, and apparently of societies stretching back into antiquity, it must be seriously regarded by the medical profession, despite the moral and religious overtones which disturb some of us. It is here to stay, and physicians who admit this can best advise their patients, many of whom are going to drink come what may, on what temperance means in the best opinion of current medical research.

Robert W. Prichard, M.D.

References

1. Best CH et al: Liver damage produced by feeding alcohol or sugar and its prevention by choline, *Brit Med J* 2:1001-1006, 1949.
2. Lieber CS, Rubin E: Current concepts: alcoholic fatty liver, *New Eng J Med* 280:705-708, 1969.
3. Rubin E, Lieber CS: Alcohol-induced hepatic injury in nonalcoholic volunteers, *New Eng J Med* 278:869-876, 1968.
4. Lelbach K: Liver damage in chronic alcoholism. Results of clinical biochemical and histological studies of 526 chronic alcoholics during a voluntary withdrawal period in a sanitarium. Part III: Bioptic-histologic results. *Act Hepatosplen* 14:9-39, 1967. Summarized in *Gastroenterology* 53:670-672, 1967.
5. Hartroft WS: Introductory remarks to the symposium on alcohol, metabolism and liver disease, *Fed Proc* 26:1432-1435, 1967.

Committees & Organizations

MAY MEETING OF THE EXECUTIVE COUNCIL

The following is a brief summary of Executive Council Meeting of Saturday, May 16, 1970.

The spring meeting of the Executive Council preceding the annual meeting convened at The Carolina, Pinehurst, North Carolina at 9:00 a.m. with President Edgar T. Beddingfield presiding. Following the roll call a quorum was declared by Secretary Charles W. Styron.

The minutes of the meetings of the Executive Council of May 17, August 3, September 28, October 12, 1969, and February 1, 1970 were approved.

The Committee on Relative Value Study recommended adoption of coding and nomenclature in keeping with coding and nomenclature of the American Medical Association. The Committee reaffirmed the need for North Carolina Relative Value Studies and will make necessary corrections and additions in the 1964 North Carolina Relative Value Studies. The Committee emphasized the absence of relativity in conversion factors between the various sections.

The Committee on Physical and Vocational Rehabilitation presented a resolution, adopted by the Executive Council, that the Medical Society of the State of North Carolina express strong disappointment to the State Government in not appropriating sufficient funds to match the allotted federal funds for vocational rehabilitation and firmly urges that every effort be made to encourage these funds to be fully matched in the future.

The Committee on Social Service Programs (including Title XIX, Medicaid) presented a motion, approved by the Executive Council and sent to the House of Delegates the following:

"Whereas, it is recognized that the most complicated medical and surgical cases are referred to larger hospitals for treatment, this Committee recommends very strongly that arrangements be made for a reasonable professional fee be paid

for each patient by the third party payor under the Medicaid program."

The Committee on Constitution and By-Laws proposed numerous changes, referred without basic change to the House of Delegates by the Executive Council. (Since numerous changes in these recommendations were advised later by the reference committee and upheld by the House of Delegates, they are not enumerated here).

The Executive Council considered in detail the ruling of the Attorney General supporting the authorization to pay chiropractors under Medicaid. The President, the Committee on Legislation, and the Legal Counselor were directed to pursue the matter and to consider relief in the courts.

The Journal was advised that the Executive Council favored the continuation of acceptance of cigarette advertising.

The Committee on Mental Health presented the resolution on interruption of pregnancy. The resolution held that initiation, continuation, and interruption of pregnancy is a personal responsibility of each woman and should not be regulated by any laws. It held furthermore that any health problems arising out of pregnancy are a concern of the pregnant woman and her chosen medical doctor. The resolution was referred to the House of Delegates.

The Executive Council endorsed in principal, a very inclusive statement on the medical aspects of sports, but requested certain changes in wording and thereafter submission to the House of Delegates for consideration.

A policy statement of the Committee on Occupational Health was read, discussed, and received with approval by the Council.

The Resolution on Physicians' Assistants was referred to Reference Committee II for discussion and study. Legal problems in employment of physicians' assistants were discussed and are to be studied further by the Legislative Committee and the Board of Medical Examiners.

There was no discussion on the AMA report of the Committee on Long Range Planning. This report (also called the Himler Report) was referred to a special Reference Committee for study with later presentation to the House of Delegates.

The Executive Council referred an additional report of the ad hoc Committee on Relationship of the Medical Society of the State of North Carolina to North Carolina Blue Cross - Blue Shield, Inc. This report recommended division of the North Carolina Blue Cross - Blue Shield Board in such manner that the majority of the Board for Blue Shield matters be practicing physicians." This matter was discussed at length. The Council moved to refer this part of the Report to the House of Delegates with a recommendation for disapproval.

The Committee on the Headquarters Facility gave an account of progress on the Headquarters Building. The Medical Society of the State of North Carolina encourages donations, memorial gifts, et cetera for furnishing of the new building.

The proposed rate increase on Professional Liability Insurance of 36% was accepted. The acceptance was based on study of actuarial data with the knowledge that the carrier offers the lowest rate available in North Carolina and lower than rates in most other states.

The Council approved a movement of pursuing advancement of nursing education through the Joint Committee on Nursing Education, a subcommittee of the State Board of Education and the State Board of Higher Education. It was suggested that a full time director and staff would be required.

A proposed Board of Directors of MEDPAC of North Carolina was approved.

The Council elected the following members to the North Carolina Association of Professions Board of Directors:

John R. Kernodle, M. D.

John S. Rhodes, M. D.

John C. Hamrick, M. D.

Harold Adolph, M. D., medical missionary in Ethiopia was voted to honorary membership for the duration of his term as missionary.

The position paper requested of the Medical Society of the State of North Carolina by a North Carolina State Government Commission (to study the Problems of Emotionally Disturbed Children in North Carolina) was presented, discussed, and referred to a Reference Committee of the House of Delegates.

The Council disapproved of Resolution No. 1 - opposition of Medicare Law in general - and referred to the House of Delegates. Resolutions No. 2 to 14 were referred automatically to the House of Delegates. The Resolution on Traffic Safety was referred to the House of Delegates without comment.

Actions of the House of Delegates on the above items will appear in medical society publications.

Respectfully submitted,
Charles W. Styron, M. D.
Secretary, Medical Society
of the State of N. C.

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JAMES T. BARNES

RESOLUTION IN TRIBUTE TO JAMES T. BARNES

WHEREAS James T. Barnes is retiring from the position of Executive Vice-President of the Medical Society of the State of North Carolina effective July 1, 1970; and

WHEREAS Mr. Barnes was the first paid employee of this Society, having been the last of ten applicants interviewed for the position of its first Executive Secretary by a committee headed by Dr. Eric Bell, Sr., and meeting at the Cherry Hotel in Wilson, and having been hired at 2:00 A.M. on July 19, 1947, during the term of President Frank A. Sharpe, and

WHEREAS he has since then been in the continuous employ of this Society for almost twenty-three years; and

WHEREAS he has organized, managed, and enlarged the headquarters staff with consummate skill to serve the members of this Society, and the causes of medicine within the state; and

WHEREAS he has managed the fiscal affairs entrusted to him with such acumen that his efforts over a twenty-two-year period have resulted in revenues to the Society for its activities, over and above that from membership support, of an amount approximating one million dollars, and

WHEREAS the net assets of the Society at the conclusion of his status of Treasurer on September 30, 1969, was considerably in excess of three-quarter million dollars; and

WHEREAS during his time and as an expression of his concern for the work of the Society he had been willing and had even recommended that his personal compensation be set below that of men of less tenure and less capacity in similar positions of trust in other medical societies; and

WHEREAS he has had the responsibility of overseeing the beginning of construction of the new headquarters facility, and he has contributed greatly to the assurance that this facility will be a prominent and permanent home of the headquarters of this Society; and

WHEREAS his efforts to enhance the stature of this Society as a component of the American Medical Association has brought not only credit to this Society, but also national recognition to him personally, to

wit: The Presidency of the American Association of Medical Society Executive Directors, and selection for designation as a "Stemwinder" among the nation's medical society leaders, as published in the AMA PR Doctor, and

WHEREAS his service to others outside of his Society duties may be judged by his participation in the activities of the following organizations of which he is a member: N. C. Patient Care Committee, Board of Directors of Doctor's Museum, North Carolina Health Council Association for the N. C. Regional Medical Program, N. C. Mental Health Association, N. C. Mental Health Council, N. C. Conference of Social Services, N. C. Hospital Association, N. C. Public Health Association, American Public Health Association, N. C. League for Nursing, and the National League for Nursing; and

WHEREAS he has always championed the cause of good medical care for all, and has endeavored to inform the Society of events affecting this cause, so that the Society may respond with an informed judgment on its position; and

WHEREAS his devoted service has known no limitation of time or distance in an effort to counsel with and serve its members; and

WHEREAS in all this he has never tried to dictate to the Society what it should do, but rather help the Society with all his talents to carry out its work; and

WHEREAS all who have been closely associated with him, the officers, committee members, staff members, and members at large have come to love this dedicated man; and

WHEREAS his love for this Society is best expressed in his closing words in his report of the Executive Vice-President for this year; to wit:

No one can find greater satisfaction than in the love of the cause one has served. This tribute I pay to the Society and to the profession it represents. If there are capabilities remaining, these were committed to you more than two decades ago and while a capacity remains it is fully committed today.

Therefore, Be It Resolved that this House of Delegates hereby pay tribute and express its deep appreciation and thanks to Mr. James T. Barnes for his loyal and devoted service to

the Medical Society of the State of North Carolina and its component societies and its members during twenty-three years; and be it further

Resolved that recognition be hereby given to his many contributions of time and talents, often above and beyond the call of duty, to the Society and its members, to many public, private, and professional organizations dealing with the health care needs of all citizens of North Carolina, and to the causes of American medicine throughout the nation; and be it further

Resolved that in an effort to do lasting honor to this man, beloved of all and whom we hold in such high esteem, this House of Delegates does hereby empower the Executive Council to have painted a portrait of Mr. Barnes, to be suitably framed and permanently displayed in the headquarters facility of the Society, and that an appropriate and framed photographic copy of the portrait be given to Mr. Barnes; and be it further

Resolved that (a) this resolution be spread upon the minutes of this House of Delegates, (b) that a copy bearing the date of adoption and the signature of the Speaker of the House be published in the *North Carolina Medical Journal*, and that similar copies be made available as requested to his many friends and associates for display or publication as they may see fit; (c) that a dated, signed, and appropriately framed copy be permanently displayed adjacent to the portrait of Mr. Barnes, and (d) that another dated, signed, and appropriately framed copy be given to Mr. Barnes.

Louis deS. Shaffner, M.D.

/s/ James E. Davis, M.D., Speaker
House of Delegates
Medical Society of the State of North Carolina



They didn't have time to get a cancer check-up either.

They all had something better to do with their time.

They had to work. Or relax with a little golf. Or go to the movies. Or just loaf around.

They couldn't find five minutes for a cancer check-up. So their time ran out.

That's the real shame of it. The fact that every fourth cancer death is totally needless. In many cases, the doctor could have cured the cancer if their patients had come to them sooner.

One thing everyone should do is take time to learn the seven warning signals of cancer. We tell our subscribers they won't prevent them from getting it,

but they could save their life.

Here they are:

1. Unusual bleeding or discharge
2. A lump or thickening in the breast or elsewhere
3. A sore that does not heal
4. Change in bowel or bladder habits
5. Hoarseness or cough
6. Indigestion or difficulty in swallowing
7. Change in wart or mole

Of course, medical research is constantly working to find better ways to cure cancer.

And doctors are quick to put these

discoveries to work.

But there's more than just treatment. There's prevention. We at North Carolina Blue Cross and Blue Shield feel the more your patients know about cancer the better they'll be able to protect themselves against it.

We're also striving to remove the financial barriers for those who need medical care. We maintain a strong, unique relationship with the profession that helps make better health possible for everyone.

We believe there's more to good health than just paying bills.



North Carolina Blue Cross and Blue Shield, Inc.

Bulletin Board

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Duke's School of Medicine will increase its first-year enrollment this fall by 18—from 86 to 104. This will mark the third increase in class size in five years.

Additional work and training facilities are being allocated to provide for the new students. The increase is aided by a grant from the Department of Health, Education and Welfare for a five-year period with startup funds for the first year of \$189,000.

The Medical Society of the State of North Carolina and the North Carolina Bar Association have announced their joint support of the proposed Duke-operated Center for Driver Education, Research and Education.

Dr. Edgar Beddingfield of Wilson, immediate past president of the medical society, and Lindsay C. Warren, Jr. of Goldsboro, bar association president, announced their professions' support at a meeting at Duke with President Terry Sanford and Chancellor pro tem Dr. Barnes Woodhall.

The center, which would be located in Research Triangle Park, would aim at a reduction of highway slaughter through research into medical, sociological, and physiological effects of numerous medicines, stresses, and other influences on drivers.

Dr. Guy L. Odom, a member of the Duke faculty since 1943 and chief of the division of neurosurgery, has been named president-elect of the American Association of Neurological Surgeons. He currently is president of the Society of Neurological Surgeons.

Dr. Edward S. Orgain, professor and chief of the cardiovascular disease service, and Dr. Robert E. Whalen, association professor in the division, have been named to fellowship status in the American College in Cardiology.

Dr. Siegfried Heyden, associate professor of community health sciences, was guest lecturer in April to the Austrian Society of Internal Medicine at the University of Vienna.

Dr. J. Leonard Goldner, professor and chief of orthopaedic surgery, has just returned from delivering lectures and attending meetings in Australia, Japan, the Netherlands, Denmark, Finland and Sweden.

Dr. Joseph A. C. Wadsworth, professor and chairman of ophthalmology, presented two papers in April before the Louisiana-Mississippi Ophthalmological Society on effects of thyroid disease on the eye and tumors of the eye socket.

Dr. Ewald W. Busse, J. P. Gibbons Professor of Psychiatry and chairman of psychiatry, is the new

president-elect of the American Psychiatric Association and will become president in May of 1971. He is the association's first president from North Carolina since a Raleigh physician held the office from 1887-88.

Dr. David C. Sabiston, Jr., professor and chairman of surgery, has been appointed chairman of the Surgery B Study Section, Division of Research Grants, National Institutes of Health, for a two-year term beginning July 1. The section is responsible for review and evaluation of research grant applications and for survey of the status of current research.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE

Dr. Cecil Sheps of the UNC faculty delivered the keynote address at the annual meeting of the Canadian Public Health Association in Winnipeg, Canada in May.

Dr. Sheps' topic was "Interdisciplinary Approaches to Problem Solving in the Major Community."

He is director of the University's Health Services Research Center, a major division of the University that conducts research in the delivery of health care services in community settings.

Dr. Paul L. Munson, UNC School of Medicine, has been elected secretary-treasurer elect and member of the council of the American Society of Pharmacology and Experimental Therapeutics.

Dr. Munson, professor and chairman, Department of Pharmacology, will assume the position July 1.

The following leaves of absences and resignations have been announced by the University of North Carolina at Chapel Hill.

Dr. Floyd W. Denny, professor and chairman, Department of Pediatrics, will begin a year's leave Sept. 1, to conduct research in the laboratories of Dr. Davie Tyrrell in the Medical Research Council, Clinical Research Centre in London, England.

Dr. Joseph S. Pagano, associate professor of medicine and bacteriology, School of Medicine, will be on leave July 1, to work in the laboratory of Dr. Roger Weil, Department of Biophysics, University of Geneva, Geneva, Switzerland.

Dr. J. Donald Johnson, associate professor in the Department of Environmental Sciences and Engineering, School of Public Health, will be on leave one year beginning July 1 to study with Dr. David Dryssen and his group in the Department of Analytical Chemistry at the University of Gothenburg, Sweden.

Dr. Chester J. Cavallito, professor in the School of Pharmacy will resign June 30 to accept a position with Ayerst Laboratories, New York.

Dr. Frank S. Johnston, Jr., associate professor in the School of Medicine, resigned April 30 to enter private practice.

**TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
FEBRUARY 1970 AND MOST RECENT 12-MONTH TOTALS**

COUNTY	WHITE				NONWHITE				COUNTY	WHITE				NONWHITE						
	Perinatal Deaths		Total Deliveries Mar. 1969 - Feb. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Mar. 1969 - Feb. 1970	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries Mar. 1969 - Feb. 1970	Perinatal Rate Per 1,000 Deliveries							
	February 1970	March 1969 - February 1970			February 1970	March 1969 - February 1970				February 1970	March 1969 - February 1970									
NORTH CAROLINA	140	1694	67175	27.9	107	1355	28387	47.7												
ALAMANCE		26	1318	19.7	1	27	450	60.0	PENDER	1	6	123	48.8		6	141	42.6			
ALEXANDER	2	16	336	47.6			35	-	PERQUIMANS			70	-		2	48	-			
ALLEGHANY		2	142	-			6	-	PERSON	8	278	28.8		1	10	194	51.6			
ANSON		3	152	-	2	20	295	67.8	PITT	4	21	749	28.0	3	38	684	56.6			
ASHE	1	8	326	24.5			1	-	POLK		2	115	-		3	36	-			
AVERY	2	12	231	51.9			2	-	RANDOLPH	1	34	1270	26.8	1	5	137	36.5			
BEAUFORT	1	9	388	23.2	2	11	262	42.0	RICHMOND	2	20	475	42.1	2	15	288	52.1			
BERTIE		7	94	-		15	253	69.3	ROBESON	1	21	550	38.2	2	56	1448	38.7			
BLOOM		3	234	-		8	218	36.7	ROCKINGHAM	1	31	970	32.0	4	19	414	45.8			
BRUNSWICK	1	9	261	34.5	1	6	152	39.5	ROWAN	6	33	1176	28.1	1	16	311	51.4			
BUNCOMBE	6	59	2097	28.1		13	278	46.8	RUTHERFORD		16	739	21.7	1	9	148	60.8			
BURKE	2	28	958	28.2		2	91	-	SAMPSON	1	12	409	29.3	2	25	337	74.2			
CABARRUS	3	1044	28.7		14	279	50.2	SCOTLAND		12	294	40.8	1	11	282	39.0				
CALDWELL	4	1118	36.7	1	8	101	79.2	STANLY		18	564	30.8		2	134	-				
CAMDEN	2	52	-		1	37	-	STOKES	1	11	318	34.8		1	42	-				
CARTERET	1	19	520	36.5		2	71	-	SURRY	1	32	914	35.0		5	63	-			
CASWELL	2	143	-	1	13	182	71.4	SWAIN	1	3	93	-			69	-				
CATAWBA	7	48	1514	31.7		8	226	35.4	TRANSYLVANIA	2	14	296	47.3	1	2	25	-			
CHATHAM	1	3	318	-	1	9	180	50.0	TYRRELL			29	-		2	31	-			
CHEROKEE		6	295	20.3		1	10	-	UNION	2	20	705	28.4	1	9	288	31.3			
CHOWAN		1	69	-		2	87	-	VANCE		5	323	15.6		24	378	63.6			
CLAY	1	6	91	-			1	-	WARREN	4	62	3084	20.1	10	62	1176	52.7			
CLEVELAND	1	27	986	27.4	1	22	434	50.7	WASHINGTON		2	51	-	1	6	156	38.6			
COLUMBUS		11	490	22.4		20	333	60.1	WATAUGA		4	136	-	1	10	151	66.2			
CRAVEN	4	34	1180	28.8	2	16	376	42.6	WAYNE		12	371	32.3			4	-			
CUMBERLAND	12	112	3828	29.3	3	62	1402	44.2	WILKES	5	25	1141	21.9	3	39	571	68.3			
CURRITUCK			60	-		1	31	-	WILSON	4	29	844	34.4			57	-			
DARE		3	109	-				-	YADKIN		20	535	37.4	4	23	581	39.6			
DAVISON	1	50	1456	34.3	1	13	255	51.0	YANCEY		5	366	13.7		2	36	-			
DAVIE		5	272	18.4	1	4	66	-			5	201	24.9			6	-			
DUPLIN	3	10	345	28.3		14	306	45.8	CITIES											
DURHAM	3	31	1468	21.1	4	43	979	43.9	City totals are also included in county totals											
EDGECOMBE		9	415	21.7		21	253	38.0	ALBEMARLE		1	134	-		1	43	-			
FORSYTH	7	68	2771	31.8	2	56	1144	49.0	ASHEVILLE	2	20	705	28.4		11	235	46.8			
FRANKLIN		6	183	32.8		12	262	65.8	BURLINGTON		11	585	18.8		10	139	71.8			
GASTON	8	65	2523	25.8	6	34	486	70.0	CHAPEL HILL		6	323	18.6		4	53	-			
GATES	1	2	46	-		5	90	-	CHARLOTTE	5	74	3120	23.7	1	7	85	1995	42.6		
GRAHAM		1	109	-			15	-	CONCORD		8	255	39.0		9	108	83.3			
GRANVILLE	7	237	29.5	1	13	371	35.0	DURHAM	2	20	936	21.4	4	41	856	47.8				
GREENE	4	104	-	2	7	147	47.6	EDEN	1	4	217	-		2	65	-				
GUILFORD	6	99	3893	25.4	10	81	1605	50.5	ELIZABETH CITY		2	155	-		3	95	-			
HALIFAX	1	405	24.7	4	28	982	48.1	FAYETTEVILLE	4	36	989	38.4	1	34	607	56.0				
HARNETT	2	19	548	34.7	1	15	325	46.2	GASTONIA	3	23	631	27.7	3	13	210	61.8			
HAYWOOD	4	26	679	38.3		1	17	-	GOLOSBOBO	4	10	335	29.8		18	247	72.8			
HENDERSON	1	22	671	32.8		2	51	-	GREENSBORO	1	46	1852	25.1	7	50	934	53.5			
HERTFORD		9	130	69.2	1	18	263	68.4	GREENVILLE		8	324	24.7	3	11	208	52.9			
HOKE	1	3	108	-		3	235	-	HENDERSON		3	127	-		10	146	88.5			
HYDE		2	37	-		4	36	-	HICKORY	2	14	375	37.3		4	102	-			
IREDELL	1	27	958	28.2	1	18	331	44.4	HIGH POINT	1	24	843	28.5	3	19	451	42.1			
JACKSON	1	5	290	17.2		1	64	-	JACKSONVILLE		10	424	23.6	1	4	68	-			
JOHNSTON		23	748	30.7	2	18	331	54.4	KINSTON		4	300	-		4	229	-			
JONES		1	77	-		1	73	-	LENUIR		6	212	28.3		4	54	-			
LEE	1	5	398	12.6		5	169	29.8	LEXINGTON		10	261	38.3		4	87	-			
LENOIR	1	12	598	20.1	1	13	428	30.4	LUMBERTON		3	185	-		9	195	48.2			
LINCOLN		12	548	21.9		5	93	-	MONROE	1	6	130	46.2	1	6	77	-			
MCDOWELL	3	24	534	44.9		3	44	-	NEW BERN		5	164	30.5	1	6	122	49.2			
MACON	1	6	219	27.4		1	8	-	RALEIGH	4	34	1039	20.7	6	30	544	63.4			
MADISON		8	224	35.7				-	REIDSVILLE		3	176	-		2	5	102	48.0		
MARTIN		6	197	30.5		16	260	61.5	ROANOKE RAPIDS		6	184	32.6		3	40	-			
MECKLENBURG	7	120	4768	25.2	9	99	2322	42.6	ROCKY MOUNT E		2	109	23.1		7	150	57.4			
MITCHELL		5	195	25.6			3	-	ROCKY MOUNT N	1	6	238	-		7	94	-			
MONTGOMERY		7	256	27.3		9	110	81.8	SALISBURY	2	5	212	23.6		6	142	42.3			
MOORE	1	24	464	51.7	1	9	240	37.5	SANFORD		3	181	-		2	71	-			
NASH	2	11	558	19.7	1	29	518	56.0	SHELBY		5	183	27.3	1	6	126	47.6			
NEW HANOVER	4	26	1215	21.4		18	384	48.9	STATESVILLE	1	11	277	39.7		6	144	55.6			
NORTHAMPTON		1	105	-		11	291	37.8	THOMASVILLE		9	185	48.6		6	99	-			
ONSLOW	4	65	2179	29.8	4	23	433	53.1	WILMINGTON	3	15	571	26.3		12	321	37.4			
ORANGE		19	839	22.6	1	10	228	43.9	WILSON		10	288	34.7	1	9	266	33.8			
PAMLICO		3	83	-		3	57	-	WINSTON SALEM	3	54	1462	36.9	1	52	1083	48.0			
PASQUOTANK		6	289	20.8		3	173	34.7												

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

"Nurses need more education in order to communicate with doctors and administrators," a British nursing educator said here in May.

Miss Muriel A. Hibbert, principal tutor from Northampton General Hospital, England, visited the University of North Carolina School of Nursing in May.

Sponsored by the Florence Nightingale International Foundation, Miss Hibbert observed selection procedures for nursing students and methods of evaluating student progress.

* * *

Alumni and faculty of the University of North Carolina School of Medicine presented five Distinguished Service Awards for outstanding contributions to medical education here in May.

Recipients were Dr. William Eugene Cornatzer, chairman, Department of Biochemistry, University of North Dakota School of Medicine, Dr. Charles Ely Flowers, Jr., professor and chairman, Department of obstetrics and Gynecology, University of Alabama Medical Center; Miss Grizzelle Mitchell Norfleet, founder of the institution in Durham, N. C. which grew into the N. C. Cerebral Palsy Hospital; Sigma Sigma Sorority; and Dr. Henry Stuart Willis, former president of the National Tuberculosis Association, superintendent of the North Carolina Sanatorium System, and clinical professor of medicine at the UNC School of Medicine.

Presentations were made at the 16th annual Distinguished Service Awards program during Medical Alumni Weekend here in Chapel Hill by UNC Medical School Dean Isaac M. Taylor.

* * *

Dr. Warner Wells, professor of surgery in the Medical School, is author of a chapter of commentary on "Science and War," in a new book entitled "William Osler -- The Continuing Education," published by Charles Thomas of Springfield, Ill.

Essays by Sir William Osler, who taught at the John Hopkins University Medical School, and who later became Regius Professor of Medicine at Oxford University in England, are printed -- together with accompanying essays by distinguished physicians and surgeons of the present day.

* * * *

Dr. James Gallagher has been appointed William Rand Kenan Jr. Professor of Education and director of the Frank P. Graham Child Development Center, effective Sept. 1.

He comes to Chapel Hill from Washington, D. C., where he has been associate commissioner of education, U. S. Office of Education, and chief of the Bureau of Education for the Handicapped.

* * *

The following faculty appointments for the University of North Carolina Division of Health Sciences have been approved by President William C. Friday and the University's Board of Trustees.

MEDICINE: Roy V. Talmage, professor of surgery, has taught since 1948 at Rice University and served from 1967-1969 on a review committee in the Radiological Physics Division. He holds an M.A. from

the University of Richmond and the Ph.D. from Harvard University.

William Jay Yount, associate professor, is currently teaching at Rockefeller University in New York. He is a graduate of the University of Wisconsin and holds the M.D. from the University of Wisconsin School of Medicine.

Takey Crist, assistant professor, has served as a resident at N. C. Memorial Hospital here since 1966. A native of New York, he holds the A.B. and M.D. degrees from the University here.

William David Heizer, assistant professor, is currently clinical and research fellow at the Massachusetts General Hospital in Boston. A native of Rawlins, Va., he is a graduate of King College in Bristol, Tenn., and holds the M.D. from Johns Hopkins School of Medicine. He served two years as clinical associate at the National Institute of Health in Bethesda, Md.

Robert Swan Lawrence, assistant professor, is currently a resident of Massachusetts General Hospital. A native of Philadelphia, Pa., he is a graduate of Harvard College and holds the M.D. degree from Harvard Medical School. From 1967-1969 he was medical epidemiologist at the Central American Malaria Research Station in San Salvador.

Keiji Marushige, assistant professor of biochemistry, is currently research fellow at the University of British Columbia, Vancouver, Canada. A native of Japan, he holds the B.A., M.Sc. and Ph.D. degrees from Kyoto University in Japan. He served also four years as research fellow at the California Institute of Technology.

M. Steven Piver, assistant professor, is currently a fellow at the University of Texas. A native of Washington, D. C., he is a graduate of Gettysburg College and holds the M.D. from Temple University Medical School.

MEDICINE -- Chapel Hill Pediatrics, Professional Association: William Gustavus Conley III, part-time instructor of pediatric medicine. A native of Charleston, W. Va. he holds the M.D. from the Medical College of Virginia.

Charles I. Sheaffer, part-time instructor in pediatric medicine. He is a graduate of Butler University and holds the M.A. and M.D. degrees from the University of Virginia.

Robert J. Senior, part-time instructor of pediatric medicine. He is a graduate of Franklin and Marshall College and holds the M.D. from Jefferson Medical College.

PHARMACY: Kuo-Hsiung Lee, assistant professor of medicinal chemistry, is currently a post-doctoral fellow in organic chemistry at the University of California in Los Angeles. A native of Taiwan, he is a graduate of Kaohsiung Medical College, holds the M.S. in organic pharmacy from Kyoto University in Japan and the Ph.D. in medicinal chemistry from the University of Minnesota.

Edward John Triggs, assistant professor, is currently teaching at the University of Alberta in Edmonton, Canada. A native of England, he is a

graduate of Chelsea College, London University in England, where he also received his Ph.D. degree.

PHYSICAL THERAPY: Charles Peter Schuch, assistant professor of physical therapy and assistant director, Physical Rehabilitation at Dorothea Dix Hospital, Raleigh, has served as director and physical therapist, since 1954, at the Rehabilitation and Cerebral Palsy Center in Raleigh. He is a graduate of the University of the State of New York and holds the certificate in physical therapy from Stanford University and the M.S. from the University of Pennsylvania.

PUBLIC HEALTH: Lawrence L. Kupper, assistant professor, has been serving the past year as student research assistant at the University here. He is a graduate of the University of Maryland and holds the M.S. and Ph.D. from the University here.

Karol Jozef Krotki, visiting professor, has served since 1968 as professor of sociology at the University of Alberta, Edmonton, Canada. A native of Cieszyn, Poland he holds the M.A. and B.A. degrees from Cambridge University and the M.A. and Ph.D. degrees from Princeton University.

Robert J. Myers, visiting professor, served from 1967-1968 as manpower advisor to the Government of Zambia, Lusaka, Ford Foundation. A Knoxville, Iowa native, he is a graduate of Washburn University and holds the M.S. and Ph.D. degrees from the University of Chicago.

Dr. Louis G. Welt, Chairman of the Department of Medicine, of the UNC School of Medicine, was featured on the UNC-TV network's "Focus on Medicine" in May.

Talking about "The Management of Chronic Renal (kidney) Insufficiency," Dr. Welt appeared in two live broadcasts which included prepared remarks by Dr. Welt followed by a question and answer period during which time any physician in the state could call in questions on the subject.

* * *

Hundreds of medical alumni, their wives and families came back to Chapel Hill in May for two days of reunions, tours, speeches and the annual meeting of the UNC Medical Alumni Association.

The annual Hodges Lecture was delivered by Dr. Andrew G. Morrow, chief, Clinic of Surgery, National Heart and Lung Institute, on "Hypertropic Subaortic Stenosis: Some Clinical and Hemodynamic Features and the Results of Operative Treatment."

* * *

Dr. Carl W. Gottschalk, UNC School of Medicine, was elected in May to the Council of the American Association of University Professors.

Dr. Gottschalk, Kenan professor of medicine and physiology, will participate with 39 other Council members and officers in determining policies and program for the Association's 89,000 members.

Dr. Gottschalk was also honored recently by being chosen to receive the Homer W. Smith Award in Renal Physiology. Presented by the New York Heart Association, the award gives recognition for a major contribution to renal physiology.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Seven associate professors at the Bowman Gray School of Medicine recently were promoted to the rank of full professor. They are Dr. A. Robert Cordell, surgery; Dr. Ivan W. F. Davidson, pharmacology; Dr. John H. Felts, medicine; Dr. Frank C. Greiss, Jr., obstetrics and gynecology; Dr. Jesse H. Meredith, surgery; Dr. Emery C. Miller, Jr., medicine; and Dr. Herman E. Schmid, Jr., physiology.

Promotions for them and for 15 other members of the full-time faculty will become effective July 1.

Advanced to associate professor were Dr. Robert W. Bond, physiology; Dr. Bill C. Bullock, laboratory animal medicine; Dr. John P. Gusdon, Jr., obstetrics and gynecology; Dr. Richard Janeway, neurology; Dr. C. Douglas Maynard, radiology; Dr. William G. Montgomery, urology; Dr. William S. Pearson, psychiatry; Dr. Modesto Scharyj, pathology; Dr. L. Earl Watts, medicine; and Dr. Richard L. Witcowski, radiology.

Promoted to assistant professor were Dr. Kenneth P. Chepenik, anatomy; Dr. Bill J. Kittrell, otolaryngology; Dr. Robert E. Robinson, III, medicine (research); Dr. Henry C. Turner, anesthesiology; and Dr. Nancy O. Whitley, radiology.

Members of the part-time faculty for whom promotions were approved are Dr. John H. Monroe of Winston-Salem, to associate professor of clinical obstetrics and gynecology; Dr. Leo B. Snow of Morganton, to assistant professor of clinical radiology; and Dr. Robert P. Crouch of Asheville, to assistant professor of clinical surgery.

* * *

Dr. Felda Hightower, professor of surgery at the Bowman Gray School of Medicine, recently completed a one-year term as president of the Southeastern Surgical Congress. In his presidential address, entitled, "The Goodlies Land Under the Cope of Heaven," he discussed the environmental problems of the day and urged physicians to become more involved in efforts to overcome the problems.

* * *

Two members of the Bowman Gray faculty participated in the Sixth World Congress of Gynaecology and Obstetrics April 13-17 in New York City. Dr. Clark E. Vincent, professor of sociology and director of the Behavioral Sciences Center, presented a plenary session paper on "The Forgotten Patients: Parents of Adolescents." Dr. Frank C. Greiss, Jr., associate professor of obstetrics and gynecology, led a seminar on "Current Concepts of Uterine Circulatory Function."

* * *

Dr. Edward D. Bird, associate professor of medicine, was elected to the Board of Directors of the North Carolina Diabetes Association at the organization's annual meeting in Winston-Salem.

The Month in Washington

The House Ways and Means Committee approved legislation that would change the Medicare program to permit prepaid closed-panel group practice care and would set ceilings on physicians' fees under Medicare and Medicaid.

The committee did not consider national health insurance proposals for legislative action this year.

A proposal for inclusion of chiropractic under Medicare was rejected. However, a compromise provision would direct the Health, Education and Welfare Department to conduct a "very limited" study of chiropractic under Medicare, utilizing the experiences under Medicaid. Chiropractic now is a medicaid service in 15 states, being authorized for federal funds to the extent that it is legal in the state. Representatives of chiropractors lobbied intensively with committee members for the same treatment under medicare.

The committee also decided against inclusion of Social Security disabled beneficiaries under Medicare. Instead, the proposal was referred to the Health Insurance Benefits Advisory Council for further study.

The House was expected to approve the committee's bill, which included a 5% increase in cash Social Security benefits, without change. However, changes were expected in the Senate.

Provisions of the committee bill of major importance to physicians included:

Health Maintenance Organization Option: Individuals eligible for both Part A and Part B Medicare coverage would be able to choose to have their care provided by a health maintenance organization (a prepaid group health or other capitation plan). The government would pay for such coverage on a capitation basis not to exceed 95% of the cost of Medicare benefits provided to beneficiaries in the area not covered under the health maintenance organization.

Experiments and Projects in Prospective Reimbursement and Incentives for Economy: The secretary of HEW would be required to develop experiments and demonstration projects designed to test various methods of making payment to providers of services on a prospective basis under Medicare, Medicaid,

and maternal and child health. In addition, the secretary would be authorized to conduct experiments with methods of payment or reimbursement designed to increase efficiency and economy, and with community-wide utilization review mechanisms.

Limitation on Recognition of Physician Fee Increases: Charges determined to be reasonable under the present criteria in Medicare, Medicaid, and maternal and child health law would be limited by providing: (a) that for fiscal year 1971 medical charge levels recognized as prevailing may not be increased beyond the 75th percentile of actual charges in a locality during calendar year 1969; (b) that for fiscal year 1972 and thereafter the prevailing charge levels recognized for a locality may be increased, on the average, only to the extent justified by increases in the cost of production of medical services, levels of living, and the earnings of other professional, managerial, and technical personnel; and (c) that for medical supplies, equipment and services that, in the judgment of the Secretary, generally do not vary significantly in quality from one supplier to another, charges allowed as reasonable may not exceed the lowest levels at which such supplies, equipment, and services are widely available in a locality.

Payments for Services of Teaching Physicians: Medicare and Medicaid would not pay for the services of teaching physicians unless other patients who have insurance or are able to pay are also charged for such services and the Medicare deductibles and co-insurance amounts are regularly collected. Medicare attached payment would be authorized for services to hospital patients by staff of certain medical schools that now furnish these services without charge to the hospital.

Termination of Payments to Providers Who Abuse the Medicare Program: The secretary of HEW would be given authority to terminate or suspend payment for services rendered by a supplier of health and medical services found to be guilty of program abuse. Program review teams would be established to furnish the secretary professional advice in carrying out this authority.

Repeal of Medicaid Provision Requiring Expanded Programs: The requirement in present law that States have comprehensive

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Medicaid programs by 1977 would be repealed.

Prohibition of Reassignments: Medicare and Medicaid payments to anyone other than a patient or his physician would be prohibited, unless the physician is required, as a condition of his employment, to turn over his fees to his employer, or unless there is a contractual arrangement between the physician and the facility in which the services were provided under which the facility bills for all such services.

Utilization reviews in Medicaid: Require hospitals and skilled nursing homes participating in the Medicaid and maternal and child health programs to have the same utilization review committee with the same functions as in the Medicare program.

Role of state health agencies in Medicaid: State health agencies would be required to perform certain functions under the Medicaid and maternal and child health programs relating to the quality of the health care furnished to recipients.

Physical therapy Services: Under Medicare's supplementary medical insurance program, beneficiaries would be covered for up to \$100 per calendar year of physical therapy services furnished by a licensed physical therapist in his office or the patient's home

under a physician's prescription. Hospitals and extended care facilities could continue to provide covered physical therapy services to patients who have exhausted their days of hospital insurance coverage.

Chiropractors' services: HEW would conduct a study on covering chiropractors' fees (on a very limited basis) under Medicare, utilizing the experimental authority under the Medicaid program. A report on the study, including the experience of other programs paying for chiropractors' services, would be submitted to the Congress within 2 years.

* * *

The American Medical Association supported two Senate bills (S. 3297 and S. 3652) that would require labeling of prescription drug containers except where the prescribing physician indicated otherwise.

"We would emphasize very strongly, however," Dr. John J. Curry, a member of the AMA Council on Drugs, testified at a Senate Health Subcommittee hearing, "... that both bills fall short of the recommendation of the American Medical Association.

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Moliere and Medicine (continued from page 231)

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N. C. MEDICAL JOURNAL OPERATION — 1969

JOURNAL BUDGET — B

Journal Budget total expense for twelve
months ended December 31, 1969, including
Roster & Transactions

\$73,382.37

Subscriptions for dues paying members,

3,422 @ \$5.00

\$17,110.00

Income:

Roster & Journal sales

\$ 4,259.14

Author cuts

112.10

Local advertising

12,349.64

National advertising

34,140.68

Less total income

\$66,971.56

Excess of expenditures over income

\$ 6,410.81

Loss per member @ 3,422 paying dues

\$ 1.87

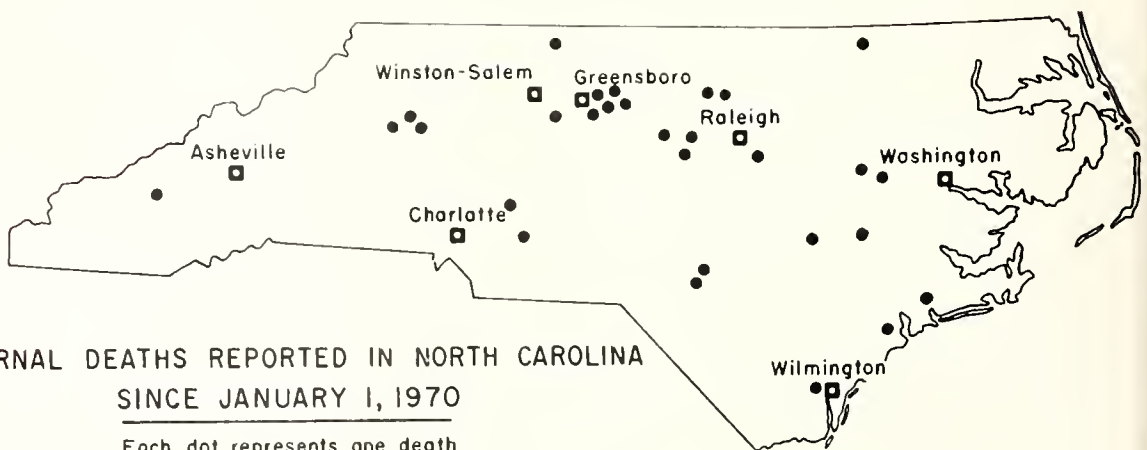
Member allocated subscription rate \$5.00

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*Actual average cost of Journal per dues

paying member \$6.87

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VOLUME 31

JULY, 1970

NUMBER 7

President's Address of Acceptance Serving Yourself

LOUIS deS. SHAFFNER, M.D.

During the past year as your President-Elect I have been governed by the provision of our Constitution and By-laws which states:

"The President-Elect shall assist the President in the performance of his duties as may be requested by him, and shall *otherwise prepare himself* for assuming the duties as President."

The first part of this provision - that is, the performance of duties requested by the President - I have tried to do - and these have not been many.

As for the second part, there were no guidelines, but some of the ways by which I have "otherwise" tried to prepare myself may interest you. One was to read letters, reports, and recommendations, the bulk of which were copies of letters Dr. Beddingfield had written to everybody about everything: for example, letters about abortion, letters to the attorney general about chiropractic, and letters to doctors in rural areas. Another has been to become used to traveling by auto and plane, within and without the state. But the best way I found to prepare myself was to observe our immediate Past President in action. This has not been an easy task, because he hasn't stayed in one place more than an hour or two at a time, and I haven't been able to keep up with him.

I have had to accept the fact that I cannot be another Dr. Beddingfield, nor shall I presume to be. Neither you nor he would expect that - for which I am grateful, because I don't like cigars. But I would be remiss if I

did not make it my first official act as your President to express to Dr. Beddingfield not only my own personal thanks but the gratitude of the Society for the truly superb and devoted service he has rendered it during the past year.

And now for the business of the moment. Do these statements sound familiar?

The dues have gone too high. The scientific programs don't interest me. The only things I get from the State Society are the Journal and the roster. Therefore, I resign.

Each year the headquarters staff and the officers get the same general comment, both written and spoken, from a few doctors who take the trouble to communicate their sentiments. Others just don't pay their dues.

This is discouraging to those of us who have accepted the responsibilities along with the honors of office.

In accepting the Presidency of the Society, I have received the highest honor that you can bestow, but I have also assumed the heaviest responsibility of anyone in the Society for the coming year.

On pondering this fact, I have been forced to reconsider my own membership. Why did I join in the first place? Why did I get interested in the activities of the Society? How can I justify taking the time away from my practice for this big job; justify it not only for myself, but also for my family and my loyal and long-suffering partners at home?

The ready answers seem logical enough. When I joined the county society, I automatically became eligible for membership in the State Society and the AMA. To join up seemed the right thing to do - for fellowship,

Delivered at the President's Dinner, Medical Society of the State of North Carolina, Pinehurst, May 19, 1970.

Requests for reprints to the Department of Surgery, Bowman Gray School of Medicine of Wake Forest University, Winston-Salem, N. C. 27103.

prestige, the scientific programs, and getting to know other doctors in the State.

When the Medicare legislation came up, I became so incensed at the hypocritical way in which its sponsors were trying to sell it to the American people that I was motivated to fight it. The way I got the facts to fight it was through the State Society and the AMA. I got involved; one thing led to another, and here I am.

As for justifying the time demanded for the Presidency, I can say that it is an honor to have been elected and a challenge to me to justify the honor you have given.

Along the way, I'll admit, I've had my doubts. The dues *are* high. Medicare was passed and things have gotten worse ever since. Except in my specialty section, there is little in the scientific program to help me in my practice. And other loyal members have expressed the same criticisms as those who have resigned.

Yet approximately 3,400 members have paid their dues for this year, 600 work without praise on our committees, and about 600 of you are here at this meeting.

What is the underlying reason for this loyalty? You who are members may not realize it, but the reason you are, and should remain, members is because you are thereby serving yourselves.

The function of a state society is to serve its members. The State Society is an organization made up of members. If the Society functions, the members are functioning. Therefore, members serve members, and you as a member are serving yourself.

True, we have a headquarters staff, but its function is to do the paper work and the leg work. You decide what services you want, and the staff helps you serve yourself. As your President, I serve each of you, including my partners at home, my family, and myself.

You have gradually decided that you can serve your scientific needs better through your own specialty organizations. As a consequence you have let the scientific services of the Society dwindle so much that you are losing interest in them. On scientific matters that cross specialty lines, however, you have decided that the Society can still serve you well. You have set up, for example, the Maternal Health Committee, which

remains very active keeping tab on all maternal deaths and thus helping you avoid others in your practice.

On the other hand, you have decided that only as a united group can you best serve yourself in general matters that affect all physicians either directly, such as Blue Shield and professional insurance problems, or indirectly via the public, such as legislation on Medicare and Medicaid. Furthermore, you have found that as a group you can best serve the public, and when you do, you again serve yourself, as through your committees on highway safety, drug abuse, marriage counseling, mental health, medical aspects of sports, *etc.*

You can enumerate all the activities of this Society and readily demonstrate that the function of each is to help you serve yourself in one way or another.

The one big area in which we seem to have failed to serve ourselves is in our fight to preserve the freedom to practice medicine as we think it should be done. It is here that your Society has been trying the hardest to serve you; and yet it is in this area that it has been getting the most criticism, not only from you but also from the public.

The reasons we have failed are two: (1) As doctors we have been unable to understand and accept, and therefore have thought we should resist, the pressures for change in our system of delivery of medical care; and (2) we have been unable to get the public to see our point of view in our outcries that they are changing it the wrong way.

Yet it is so important, not only for ourselves but also for our children and grandchildren, that we do not fail.

I believe that if we are honest with ourselves and with the public, we can help devise systems that will allow us to deliver good medical care to our patients and to get satisfaction in doing it. I believe that this Society can light the spark in this state to get this movement started.

Think of the medical needs of our increasing population. But think more of the progress we can make and the satisfaction and stimulation we can have in rendering good care with the new modalities and discoveries appearing on the horizon. What about organ preservation and transplantation, artificial

organs, controlled genetics, laser beams, ultrasonics, cryo-surgery, and chemotherapeutic agents? Let your imagination run. It is going to be very exciting to be a part of it.

In the epilogue to his book *Ferment in Medicine*, Richard Magraw makes the point that part of the cause of the ferment has been the resistance of doctors to change. He closes with a quotation from Tennyson's *Ulysses*. As you may remember, Ulysses is talking to his comrades, recalling the pleasures and adventures of the past, and expressing regret

that times and circumstances have changed. But then he sees the future as offering its own challenge to them all on another voyage. So he said to them, and I say to you: "Some work of noble note may yet be done, not unbecoming men that strove with Gods . . . Come my friends. 'Tis not too late to seek a newer world."

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Fiber-Optic Hysteroscopy: An Improved Method For Viewing The Interior of the Uterus

WILLIAM B. NORMENT, M.D. and HENRY SIKES, M.D.

Hysteroscopy is a method of visualizing the uterine canal, principally for the purpose of detecting endometrial polyps and submucosal fibroids. Both lesions are often missed with the curette, and either condition can cause uterine bleeding, which is often treated as functional in cases where dilation and curettage have failed to reveal any pathologic condition.

The first recorded attempt to view the interior of a hollow viscus was a crude effort at hysteroscopy, reported in 1864. Following the birth of a child, the attending physician inserted a small pipe into the uterus and attempted to see through this. His source of light was a candle, with a silver spoon used as a reflector. This attempt to view the interior of the uterine canal, like many others which followed it, was unsuccessful because of the lack of a suitable source of light. Another factor responsible for failures in the past has been the presence of blood in the uterus at the time of examination.

The Instrument

To overcome the first problem, we have designed diagnostic and photographic hystero-

scopes* equipped with fiber-optic cords. The light source is a power unit which contains both an incandescent lamp and an arc light, the latter being used chiefly for photography.

Editorial comment on page 265

It is a very simple matter to change from the incandescent lamp to the arc light and does not require any readjustment of the instrument. A six-foot fiber-optic cord connects the power unit with the hysteroscope.

The diagnostic hysteroscope is smaller than the photographic hysteroscope and is contained in a 24-F sheath. The photographic hysteroscope, which uses more fiber optics and a larger lens system, is contained in a 30-F sheath. Because it is more difficult to insert into the uterine canal, the latter is used only when motion pictures or still photographs are needed. The lens systems in both hysteroscopes are direct- or forward-vision systems and not the Foroblique. With the forward-vision lens system, the entire uterine canal can be observed without rotating the instrument.

Overcoming the Problem of Uterine Bleeding

Unless the fluid circulating in the uterine

*Manufactured by National Statham.

From Wesley Long Hospital, Greensboro, N. C.
Request for reprints to 344 North Elm Street, Greensboro, N. C. 27401 (Dr. Norment).

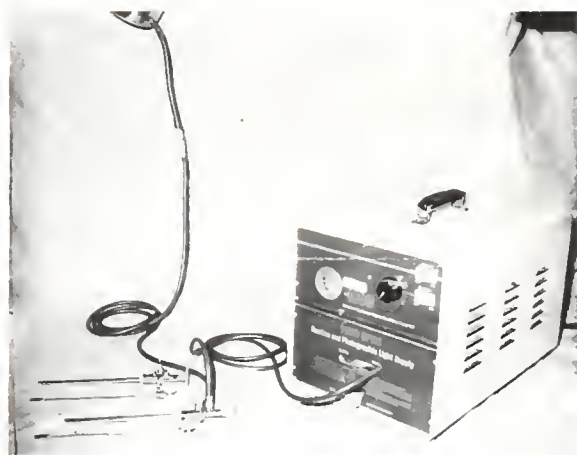


Fig. 1

Diagnostic and photographic fiber-optic hysteroscopes with power unit.

canal at the time of observation is free of blood, the interior of the uterus cannot be clearly visualized. We have overcome this problem by giving Premarin (40 to 100 mg intravenously, depending on individual patient requirements) and vitamin K (75 mg intramuscularly) the day before the examination. The dose of Premarin is repeated two to three hours before hysteroscopy. If the patient is bleeding profusely, both these medications are given on each of the two days preceding the examination. After trying many other medications, we have found the combination of Premarin (which is nontoxic and has no side effects) and vitamin K usually works very well in controlling the bleeding, and thus overcomes the second factor responsible for the failure of previous attempts to carry our hysteroscopic examination.

Uses and Contraindications

Direct vision of the uterine canal by the method to be described is a very simple procedure by which many patients can be spared unnecessary hysterectomy and others can be spared the consequences of failure to diagnose uterine lesions responsible for pain and bleeding thought to be "functional." Although this method does not replace hystero-graphy or curettement (especially in the diagnosis of endometrial carcinoma, which can accurately be done only by biopsy), it is a valuable supplement to these

diagnostic aids. In some cases hysteroscopy reveals endometrial polyps and submucosal fibroids which cannot be detected by hystero-gram, curettage, or bimanual palpation; in others, it may show that a large filling defect seen on the hystero-gram is not a submucosal fibroid or an endometrial polyp but merely an accumulation of endometrial polyps by direct visualization and, even after locating these polyps, would have difficulty in removing them with the curette, since it tends to pass over them.

In the patient with uterine bleeding and a palpable serosal fibroid, the only way to be sure that the two conditions are related is to perform a hysteroscopic examination and see if the fibroid protrudes into the uterine canal. If the fibroid is only serosal and not submucosal, it is doubtful that it has anything to do with the bleeding.

The only contraindication to hysteroscopic examination that we know of is the presence of fever or tenderness in the adnexal region. We have not used any antibiotics following the examination, and if hysterectomy is not indicated the patient is usually discharged the following day.

Technique of the Hystero-graphic Examination

We have described the technique of the hysteroscopic examination previously. To review briefly, the preparation of the patient is similar to that for dilatation and curettage. We usually use thiopental sodium, supplemented with a small amount of gas. After preparation of the vaginal vault, the cervix is grasped with a tenaculum and a uterine sound is inserted gently into the uterus to find the direction of the canal. The cervix is then dilated gradually, first with the Hegar sounds and later with the Goodell dilator. After the sheath with obturator has been inserted just past the internal os, the obturator is removed, and the lens system is introduced into the sheath. Before this step is carried out, one should be certain that the lenses are clear; if there is a leakage of moisture behind the lenses, they will occasionally become fogged.

After the power unit is connected to the hysteroscope by the fiber-optic cord, a container of fluid similar to that used for cystoscopic examination is attached to the



Fig. 2

(Left to right) A. A view through internal os looking into uterine canal. B. Photograph of endometrium taken from top of uterine canal. C. Specimen in patient, aged 54, with uterine spotting, showing large endometrial polyp. D. Photograph through hysteroscope previous to surgery showing polyp. The small dark dimple on the left is the opening of the fallopian tube.

inlet of the hysteroscope. For irrigation of the uterine canal, we used Cytal mixed with distilled water in the same proportion as that used in transurethral resection of the prostate. This eliminates any absorption of distilled water during the procedure. Since the solution is nonirritating, any small amount that might escape into the peritoneal cavity through the fallopian tubes would not be harmful. In the patients who have had a hysterectomy following the hysteroscopic examination, we often find about 20 to 30 cc of the solution in the cul-de-sac.

The fluid is allowed to circulate in the uterine canal and make its exit through the outlet on the proximal end of the hysteroscope. If the patient has been given adequate Premarin and vitamin K, the fluid usually clears very rapidly. If it does not, the container of fluid can be elevated in order to increase hydraulic pressure; this will hasten the cessation of bleeding. When the returning fluid is seen to be completely clear, accurate observation of the uterine canal can be made. If the view is not clear, it is usually because the lens system is covered by a frond of endometrium. This can be removed by withdrawing the instrument a slight distance and then stopping the flow of Cytal solution by putting a gloved finger over the outlet. Stopping the circulation of the fluid in this way also stops the motion of the fronds of endometrium, so that more accurate observation can be made. If the uterine canal is found to contain many fronds of endometrium, it is

best to remove the hysteroscope, do a curettage, and then reinsert the instrument. After the flow of water returning from the uterine canal is again clear, the hysteroscopic examination can proceed.

It is advisable to keep the hysteroscope near the internal os, since the focus is less clear when the lens is too near the fundus. The fronds of endometrium vary in color from pink to white. If any small blood clots are present, they will appear more or less bluish in color and present a striking contrast to the endometrium.

Since the uterine canal is shaped like an inverted triangle, examination of both cornua is usually a simple matter. Often one can see the opening of the fallopian tube into the cornu.

Technique of Photographic Hysteroscopy

Through the photographic hysteroscope, pictures of the uterine canal and its contents can be made with a 35-mm reflex camera or with an 16-mm movie camera. By using the strong arc light in the power supply, 35-mm photographs can be made with an exposure of 1/25 of a second. With high speed films (such as 500 ASA), even shorter exposure times are required. Before the arc light is attached to the power unit, the cooling device should be allowed to run for several minutes to prevent the bulb from burning out. When the arc light is first turned on, it is more or less purple. When the color fades and the light becomes

white, the fiber-optic cord can be attached to the instrument.

The image transmitted to the film with a reflex camera is very small and does not fill the entire frame of the 35-mm film. In making still photographs, it is wise to make several pictures of the lesion, using different exposure times. One can then select the best slides to demonstrate the pathologic condition found. For making moving pictures, 16-mm film is preferable, since the 16-mm projector can be played farther from the screen and thereby produce a larger image.

Summary

We have described a method of hysteroscopic examination which overcomes two major problems that have handicapped previous attempts to visualize the uterine canal: (1) inadequate light and (2) inability to control bleeding.

Although hysteroscopy cannot replace

hystero-graphy and curettage, it is a valuable aid in determining which uteri should be removed. It also makes it possible to photograph the interior of the uterus, both with the still camera and with the motion-picture camera.

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* * *

This work was supported by a grant from Ayerst Laboratories.

Motion picture films demonstrating this method of hysteroscopy will soon be available for showing at medical meetings.

CORRECTION

In the article entitled "Experience with Inguinal Hernia in Infants and Children" by Drs. Thomas G. Hardy and Adolpha A. Andrada (*N Carolina Med J*, June, 1970), the second sentence under the sub-heading *Discussion* (page 223) should read: "Proponents and opponents of bilateral exploration, however, agree that a contralateral hernia will occur later in 20% to 25% of patients having unilateral repair."

Public Health Needs and Goals in North Carolina

JACOB KOOMEN, M.D., M.P.H.*

Dr. Edward G. McGavran, Dean Emeritus of the School of Public Health of the University of North Carolina, has defined public health as the diagnosis and treatment of the body politic; that is, the community. It is in the spirit of this definition that we make this presentation. We will attempt to describe some of the major problems affecting the health of the public and what we might do to treat these problems, rather than to describe in narrow focus the specific activities of the State Board of Health. The reason for this is that the responsibility for health promotion, disease prevention, treatment and rehabilitation is widely shared. Although some health responsibilities are the clear-cut legislated duty of the State Board of Health, the wider scope of identification and solution of the health problems of people and their environment cuts across the boundaries of many agencies and organizations, both public, private, and voluntary.

Thus, while our report will emphasize the activities of the State Board of Health, since that is the charge in our presentation, this wider perspective must be borne in mind. Furthermore, when we speak of public health activities, we will include the work not only of our agency, but also of the local health departments. These local health departments are our partners in the provision of public health services and, indeed, represent the front line for most of our activities.

Present and Projected Activities

The following activities are presented as being major efforts essential to the protection and preservation of the health of the people of North Carolina. They are not ranked according to their importance, but were selected from many varied and extensive

health programs as representing some of the more necessary activities.

Early detection and treatment of *chronic diseases* are not sufficiently available to the adult population of the state. Adult health services for chronic disease detection through such mechanisms as multiphasic screening are of considerable importance. Indeed a coordinated, preventive program for the entire population should be considered.

The economic implications of the early diagnosis of chronic illness relative to effective treatment and prevention of long-term disability are clear, to say nothing of the social and personal potential. A strong new effort must be undertaken to develop multiphasic screening clinics which would be more readily accessible to the entire population, and to promote and extend the use of this newer concept in adult health services. These statements are particularly pertinent when one considers that 75% of medically indigent women are still in need of cancer screening—and indeed, the same is true of the total female population of the state. Approximately 95% of the indigent population do not receive early detection and screening services for other chronic conditions. The goal must be to provide adequate adult health screening, including the newer multiphasic techniques for detecting the chronic diseases, to the eligible population by a coordinated, comprehensive system of preventive services.

Public demand for *home health services*, in part due to payment for such services by Medicare-Medicaid and private insurance carriers, necessitates development of services in the 71 counties lacking their own services. The goal of the agency is to provide approximately 77,000 additional home visits by the end of 1972.

Considerable attention must be given by the state to the construction and renovation of *in-patient facilities* such as hospitals, nursing homes, extended care facilities, and related resources.

In the area of *family planning*, 80% of an estimated 260,000 indigent or medically

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indigent women of child-bearing age have not been reached by present services. Furthermore, less than 1% of males receive medically oriented birth control services. The ultimate goal must be to provide family planning and birth control services to all men and women wanting and needing them, and to promote acceptance. The end result of such efforts will be a significant reduction in unwanted births. In order to do this, we must develop a comprehensive program of medical, social, and educational services. The present program must be expanded to include people on the fringes of society, and to encourage them to seek consultation. There must be a greatly expanded system of clinics which should include innovations in the delivery of contraceptive services.

In the field of *child health*, 62% of 361,644 medically indigent infants have yet to receive nurse-screening and pediatric clinic services to prevent illness and maintain a healthy child population. Further, the present developmental evaluation clinics do not meet the present demand for services to children with potential and existing developmental problems. The goal should be to provide intensive evaluative services for all children who need them, and to provide training to increase the skills of those dealing with developmentally handicapped children. Child health screening and evaluative services must be coupled with early treatment and follow-up care. Existing programs must be expanded and designed to coordinate both public and private resources, to assure the entire child population of preventive, diagnostic, and therapeutic services.

As a corollary, 30% of the medically indigent handicapped children covered by Crippled Children's programs are not receiving necessary early quality care. The goal must be to enhance case-finding mechanisms to locate and serve all eligible children in an early stage of their condition when treatment facilitates optimum rehabilitation.

In spite of increased efforts and increased concern over the problems of *drug abuse*, the problem continues to grow. There must be increased awareness of the situation—an awareness that is perceptive and enlightened

as well as determined. The problem must be handled in ways that are humane and constructive, leading to restoration and recovery, rather than in ways that are repressive and harsh, leading to further dissociation and despair.

In the area of *accident prevention*, major efforts must be continued and expanded in a multi-organizational cooperative venture to reduce the number of drunken drivers. Experience indicates that we must remove the drunken driver from our highways if we are to make a significant impact on the slaughter that takes place there. Efforts to deal with the problem of the medically incapacitated driver must also continue. In addition, sustained emphasis must be given to the improvement of emergency medical services, including ambulances and hospital emergency rooms.

Protection of workers in North Carolina, particularly those in our growing industries, must receive our concern. Continued and expanding efforts must be made to gain new knowledge of the relationship between the employee's health and his working environment and the materials of industry which he handles. Improved surveillance and investigative techniques must be employed. With the cooperation of industry, health hazards in the working environment must be removed by appropriate engineering and other methods. Related to this is the ongoing effort to learn more about the effect of exposure to pesticides, including epidemiological and toxicological studies, and the adoption of measures to protect the public from the ill effects of these chemicals.

In addition to maintaining programs to protect North Carolinians from *communicable diseases*, including tuberculosis and venereal diseases, a special effort to control measles and German measles will be made. These common childhood diseases are not innocuous, but can have unfortunate effects. Measles may affect the nervous system and even cause death. The effect of German measles on the developing embryo and the resultant causation of serious birth defects is well-known. Vaccines are available for both of these diseases and intensive efforts can result in their being brought under control.

Dental Public Health continues to emphasize flouridation, with attention to small community and school water supplies. The State Board of Health plans to test such innovative programs as the mass self-application of fluorides by school children under the supervision of staff dentists, as well as other community research programs.

It is possible to provide restorative services to only a fraction of the eligible population in North Carolina. Auxiliary personnel must be employed to broaden the scope of public dental services effectively. These auxiliary workers, known as dental hygienists, can be a useful adjunct to the professional staff by lowering the cost of direct services to school children and making the services available to more children. Hygienists will be able to conduct the educational and preventive phases of a dental program which now consume about half the dentist's time; the dentist will then be able to double the amount of the more costly restorative services which he presently performs.

In the field of *environmental health* special efforts must be undertaken to control the growing problem of solid wastes. Under authority of an act of the 1969 General Assembly, the State Board of Health is moving rapidly to develop a statewide plan and to prepare standards for disposal facilities. Technical assistance will continue to be extended to local government units in planning and establishing approved facilities that often require the close cooperation of municipal and county governments. These local governments must make special exertions of their own to provide needed services to their constituencies.

The trend toward multiplication of small public water systems needs to be reversed by incorporation of these systems into an effective county-wide or regional system. Programs need to be realigned and strengthened to emphasize and promote these county-wide and regional systems, as well as to find increased support and direct assistance for communities experiencing water problems.

With the establishment of large nuclear facilities in the state, specific surveillance programs must be designed for each facility to

insure that the environment is adequately protected in accordance with present regulations and other accepted standards. We must persevere in our efforts to protect the public from radiation hazards associated with the growing number of industrial and other sources.

Housing will continue to be a difficult and sensitive issue. Public health programs have attacked these conditions separately from the total housing environment, but health programs alone cannot solve the problem. Development of organized, coordinated effort by state and local environmental health personnel to improve these conditions is under consideration, and an even more widely encompassing attempt at the state as well as the local level must be made to protect the quality of housing in North Carolina.

In the area of *milk production*, county units are experiencing increasing difficulty in providing adequate supervision of the industry because of its regionalized nature. Because it is exceedingly difficult for a local unit to oversee the sanitation of raw milk production, the state plans to supplement on a regional basis the farm inspection work of local health departments in order to insure continuing supervision.

In the field of *health information*, important new developments are predicted. A state center where health statistics could be collected, processed, analyzed, and disseminated would be extremely useful. Electronic data processing would be an integral part of such an undertaking. One example is a projected cancer registry which will provide an educational vehicle to aid in the care and treatment of cancer patients, as well as to assist in the dissemination of data for research purposes. Within the State Board of Health new planning and organizational approaches will be explored, such as systems concepts and program budgeting techniques, in order to plan more effectively for public health services.

Support of Local Health Departments

We at the State Board of Health have a major responsibility to support our colleagues

in the local health departments. We seek to assure competent administrative leadership for all local agencies. We seek to provide the necessary assistance and skill by multidisciplinary consultation in comprehensive program planning for our local health departments and other community agencies. We expect to intensify our efforts to orient unprepared public health professionals to their new careers as well as to provide them with continuing educational opportunities. We seek to assist North Carolina communities in developing plans to meet emergency health needs resulting from hurricanes, tornadoes, floods, or any other serious disaster.

A new undertaking by the State Board of Health would be to offer assistance in areas where local boards of health have not been able to recruit competent health directors in spite of coming together in multi-county district arrangements. In these instances the State Board of Health would assign public health physicians to serve as local health directors, possibly without cost to the local governing body. This would of course be a limited program in the beginning, but it has considerable potential for enhancing competent local administration.

Work will be sustained in improving the planning practices of local health departments by the promotion of effective techniques and the education of local staffs in using these techniques. Promotion of this matter, including the use of newer planning and management techniques, can result in the improvement of the delivery of public health services. Impetus to planning will be given by consultants in the regional offices, lending increasing importance to the field staff of this agency.

The field staff should include experienced personnel whose role will be to forge the local medical society, hospital staff, and other community agencies into well coordinated teams for the purpose of preparing and periodically testing the health components of

community disaster plans.

Finally, the pathological and toxicological services of the Medical Examiner System are in growing demand. This resource must grow with the demand, in order to continue to aid the state in the discharge of its medicolegal responsibilities to its citizens.

Conclusion

An attempt has been made to present what we feel to be some of the more important contemporary health needs and some of the measures that ought to be undertaken to meet these needs. These matters are relevant to the preservation or restoration of the physical, mental, and social well-being of the people of North Carolina. In focusing on health, we must be conscious of the problems of the individual, the family, and the community, and be aware of both personal and environmental health factors.

In conclusion, two quotations are pertinent. One is by G. H. T. Kimball, from a report to the Twentieth Century Fund:

"It is bad enough that a man should be ignorant, for this cuts him off from the commerce of other men's minds. It is perhaps worse that a man should be poor, for this condemns him to a life of stint and scheming and there is no time for dreams and no respite for weariness. But what surely is worse is that a man should be unwell, for this prevents his doing anything much about either his poverty or his ignorance."

The second statement is from our own Dr. George W. Paschal, Jr., a Raleigh surgeon and a past president of the State Medical Society:

"The solution of the complex problem of providing health services will require a coordinated effort. The most knowledgeable members of the health professions, the ablest men in the field of professional management and business skills, sound progressive community planners, and political leaders of vision must join hands in a common effort."

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SUGGESTIONS FOR AUTHORS

The *North Carolina Medical Journal* welcomes original contributions to its scientific pages, expecting only that they be under review solely by this *Journal* at a given time, and that they follow a few simple guidelines. The guidelines are as follows:

1. Subject Matter

Educational articles, especially those in which particular applications to the practice of medicine in North Carolina are developed, are one of the main objectives of this *Journal*.

Articles reporting original work by North Carolina

physicians are invited, whether the work is done in a clinic, a laboratory, or both. The editor and his consultants will evaluate the work by the usual criteria, including a proper discussion of previous work, control observations, and statistical tests where indicated.

Historical articles, especially those dealing with local history, are considered of real value and interest.

2. Manuscripts

An original and a carbon copy of the manuscript should be submitted, one for review by the editorial staff, the other by referees. The manuscript should be typed on standard-size paper, double-spaced, with wide margins (one inch on each side).

3. Biographic References

References to books and articles should be indicated by consecutive numerals and throughout the text and then typed, double-spaced, on a separate page at the end of the manuscript. Books and articles not indicated by numerals in the paper should not be included.

References will be much more valuable to the reader if they are given in a proper form and contain the full information necessary to locate them easily. The *North Carolina Medical Journal* follows the form used in the journals of the American Medical Association and the *Index Medicus*, giving the author's surname and initials, title of the article, name of the periodical, volume, inclusive page numbers, and the date of publication. It is believed that this style makes it easier for the reader to judge whether the reference is likely to prove useful to him, and enables him to locate it more quickly.

4. Tables and Illustrations

Tables and legends for illustrations should be typed on separate sheets of paper. The illustrations should be glossy black-and-white prints or line drawings. It is necessary to obtain permission from the author or publisher to reproduce illustrations which have been published elsewhere.

The change to offset printing has eliminated the expense of making cuts for illustrations. Therefore, authors will be no longer have to limit the number of their illustrations in order to stay within the *Journal's* \$20 allowance for a single article, or assume any costs exceeding that amount.

5. Style

The style followed by this *Journal* will be, in general, that outlined in the *Style Book* issued by the Scientific Publications Division of the American Medical Association, John H. Talbot, M. D., director. All manuscripts are subject to editorial revision for such matters as spelling, grammar and the like.

By following the above suggestions, writers will greatly expedite the publication of papers accepted by the *North Carolina Medical Journal*.

MULTIPHASIC HEALTH SCREENING

The June issue of the *Journal* carried an ad inviting physicians to become associated with the growing national involvement in health screening. There are now a number of medical centers and private companies getting into the field, just as there are in parallel programs for keeping one's automobile in good condition. Human health screening has been a major activity of the Kaiser-Permanente Foundation in Oakland, California, under the able leadership of Dr. Morris Collen, who combines expertise in electrical engineering and medicine.

The essentials of multiphasic screening consist in obtaining a large number of historical items through questionnaires filled out by the person being screened (he often is not a patient in the usual sense of being sick), followed by measuring objectively those things which are either associated with common diseases or furnish reliable evidence about some disease, albeit an uncommon one. While attempts are made to identify high-risk abnormalities such as diabetes and hypertension, conditions of much lower frequency like glaucoma are included too, because reliable screening tests for them exist, and perhaps because medicine is not traditionally practiced solely on the basis of statistics. Computer-based data processing techniques are an essential part of the work; without them the greater amount of information produced could not be handled in a reasonable length of time or at a reasonable cost. Another factor keeping costs down is the very sparing use of physicians, who enter the procedure only when a major medical decision needs to be made.

Finally, a report is produced which is usually sent to the person's physician for review with him. From that conference any necessary action presumably issues. The physician has little direct control over the content of the screening process. Such decisions are made by its administrators, who no doubt take into account the thoughts of their physician clientele, as well as the results of research in a variety of fields.

As multiphasic screening has developed in the Kaiser-Permanente setup, an important

function has been to regulate the workload on their clinical staff. In the past many people have delayed going to the doctor until they really felt bad, because they didn't want to spend money or didn't have any. With the advent of prepaid care plans like Kaiser-Permanente, this bar is lowered, and now the provider of medical care, not the patient, wants to keep patient visits to a minimum for economic reasons. Screening helps regulate who gets to see the doctor.

In the Kaiser-Permanente experience a number of problems connected with multiphasic screening have become apparent. Many of the abnormal conditions turned up by screening are already known to the patient and physician. Some of the tests produce misleading results which require additional testing, at considerable cost in time and money for all involved. Thus, elevated blood-pressure readings may reflect the fact that the patient ran up the stairs from the parking lot to the screening room, something not taken into account by the system. Likewise, measures to assure high-quality testing have to be improved to avoid false-positive results. A short period of malfunction by an automatic blood pressure measuring device may cause major problems in resolving the confusion over who is hypertensive and who just had a bad measurement.

More on the philosophical level is concern over the number of people who might gain access to the information kept in the screening center about a given individual. All of us have had direct or indirect experience with the often horrible problems that come when erroneous information gets into data files, computer-based or otherwise. Inaccurate utility bills, unjust credit ratings, fouled-up subscriptions—all are available to plague us when we think of how an improperly read electrocardiogram, or one stored with the wrong person's record, might jeopardize insurance or employment opportunities. No really satisfactory way has yet been evolved to preserve confidentiality, despite some elaborate schemes.

One of the big problems with multiphasic screening is that thus far no one has shown its true worth. It is very difficult to measure the effect such a center has on the health of

the general population. If Dr. X sends his patients for screening and Dr. Y does not, it is likely that neither has a large enough clientele to give a valid measure of how much good the screening does. Even Kaiser-Permanente, with their large closed panel group, has not clearly shown its value. It does seem likely that it could do no harm, and equally likely that as various third parties assume responsibility for medical bills they are going to demand that their customers keep themselves well, to whatever extent medical knowledge makes that possible. Multiphasic screening will probably play a big part in their plans, and we all need to watch developments in the field closely.

* * *

M*A*S*H

At the moment there is a movie making the rounds which has provoked considerable comment both casual and critical. The acronymic title is one familiar to most physicians; the mobile army surgical hospital of the picture is in action during the Korean war. Army posts have banned the show, Navy and Air Force theatres have let it roll, and viewers have ranged from widely enthused to actively opposed, with some even considering it a profound antiwar statement. In a *JAMA* editorial (212:1697-1698. June 8, 1970) a review is quoted which describes M*A*S*H as showing mobile hospitals to be "ghastly, but at the same time in a weird way abstracted and hilarious." A more vapid comment would be hard to imagine, especially if one were ever connected with traumatic surgery in real life.

The movie is actually nothing more than a series of burlesque skits, varieties of bladder farce which would have been closed down by the police in the days when indignation was still considered an appropriate response on occasion. The setting in a war-time field hospital merely increases the range of visual effects possible, allowing the prevailing trend toward grossness, which perhaps began with "Tom Jones," to move away from the dinner table and onto the operating table. In addition to cleverly staged operating room skits, the movie features amplified orgasms, public ridicule, stupidity, cupidity, lechery, adultery, suicide, homosexuality, drunkenness,

gluttony, and a few whiffs of marijuana, to name some of the *leit motifs*. In short, it is the very model of a modern motion picture show, and stripped of any pretensions of profundity, not at all bad for an audience whose threshold of stimulation has now risen to the blast level. If the critics leave it alone, M*A*S*H will probably find its way into the catalogue, along with the Marx Brothers' various epics, under the superheading "filthy." As a message movie its appeal will require more preciousness and purity of sentiment than most of us can muster.

* * *

THE NORMENT HYSTEROSCOPE

It is noteworthy to find members of our State Society engaging in productive investigation while in the demanding role of private practice. Dr. Norment's development of the hysteroscope is such a contribution.

There have been other members who over the years have added to our sum total of medical knowledge. The peripatetic Edward Warren of Tyrrell County is credited with the initiation of hypodermic medication in the 1850's; the studies of E. J. Wood and Fred Hanes on sprue and neuropathies; Bill Allen's genetic studies; plasma and blood bank feasibilities in Rowan County; urological instruments and heart surgery in Mecklenburg—these are some of the milestones that one immediately recalls.

Any device or theorem that might forestall extensive surgery in the female pelvis certainly deserves consideration and acceptance. Dr. Norment has such an instrument. That it is not more widely employed is due to a lack of understanding regarding the minimal time and experience needed.

It correctly belongs in the category of cystoscopy, culdoscopy and laparoscopy. The procedure has been further refined by better illumination and by using medication to minimize bleeding, two of the early deterrents. It is recommended as an adjunct for definitive diagnosis of intrauterine lesions.

Robert A. Ross, M.D.

**TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
APRIL 1970 AND MOST RECENT 12-MONTH TOTALS**

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries			Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	
	April 1970	May 1969 - April 1970				April 1970	May 1969 - April 1970					April 1970	May 1969 - April 1970				April 1970	May 1969 - April 1970			
NORTH CAROLINA	168	1934	60028	28.4		104	1366	28429	48.0												
ALAMANCE	3	30	1345	22.3		26	452	57.5		PENDER	5	121	41.3		6	156	38.5				
ALEXANDER	1	14	349	40.1		30	30	-		PERQUIMANS	7	76	-		2	47	-				
ALLEGHANY	2	4	145	-		6	6	-		PERSON	1	8	26.6	30.1	10	200	50.0				
ANSON	2	5	172	29.1		7	25	304	82.2	PITT	2	23	74	28.7	2	36	655	55.0			
ASHE	1	10	334	29.9		3	3	-		POLK	2	117	-		1	4	41	-			
AVERY	8	225	35.6							RANDOLPH	1	38	1254	30.8	2	135	-				
BEAUFORT	8	372	21.5		1	11	254	43.3		RICHMOND	3	24	494	48.6	1	17	292	68.2			
BERTIE	6	98	-		2	14	263	53.2		ROBESON	4	25	579	43.2	5	56	1502	38.6			
BLADEN	2	243	-		1	10	222	45.0		ROCKINGHAM	2	32	964	33.2	2	18	388	46.4			
BRUNSWICK	1	11	273	40.3		5	158	31.6		ROWAN	1	33	1182	27.8	1	14	305	45.9			
BUNCOMBE	7	61	2105	28.0		2	16	279	57.3	RUTHERFORD	2	17	731	23.3	8	149	53.7				
BURKE	3	29	951	30.5		1	2	85	-	SAMPSON	9	349	22.6		25	324	77.2				
CABARRUS	1	28	1039	26.9		1	16	290	56.2	SCOTLAND	14	302	48.4	1	11	293	37.8				
CALDWELL	3	39	1115	35.0		6	108	55.6		STANLY	3	19	573	33.2	2	132	-				
CANDLER	2	52	-			1	40	-		STOKES	1	10	319	31.3	1	39	-				
CARTERET	2	21	499	42.1		2	69	-		SUNNY	2	32	425	34.6	6	54	-				
CASWELL	1	141	-			10	177	56.5		SWAIN	3	90	-		2	73	-				
CATAWBA	4	45	1508	29.8		7	207	33.8		TRANSYLVANIA	1	12	294	40.8	2	25	-				
CHATHAM	1	3	323	-		8	169	47.3		TYRRELL	3	21	728	28.9	1	26	-				
CHEROKEE	1	9	278	32.4		1	2	15	-	UNION	3	21	728	28.9	9	324	27.8				
CHOWAN	1	95	-			1	3	98	-	VANCE	1	317	-	1	20	360	86.6				
CLAY	7	80	-			1	1	-		WAKE	6	56	3039	18.4	3	59	1155	51.1			
CLEVELAND	2	25	995	25.1		8	29	436	66.5	WAKREN	3	55	-		7	149	47.0				
COLUMBUS	5	16	526	30.4		3	20	326	61.3	WASHINGTON	3	136	-		9	147	61.2				
CRAVEN	3	33	1181	27.9		15	385	39.0		WATAUGA	10	374	26.7		3	-					
CUMBERLAND	12	107	3783	28.3		6	66	1359	48.6	WAYNE	4	28	1122	25.0	2	40	590	67.8			
CURRITUCK			57	-			1	29	-	WILKES	2	32	854	37.5	1	62	-				
DARE	3	3	103	-				5	-	WILSON	4	25	543	46.0	2	24	585	41.0			
DAVIDSON	3	47	1439	32.7		2	16	258	62.0	YADKIN	6	353	17.0	1	4	39	-				
DAVIE	1	6	266	22.6		2	5	71	-	YANCEY	5	212	23.6		4	-					
DOUPLIN	1	11	391	28.1		14	300	46.7		CITIES											
DURHAM	1	29	1471	19.7		5	51	966	52.8	City totals are also included in county totals.											
EDGEcombe	1	10	406	24.6		1	18	563	32.0	ALBEMARLE	1	1	134	-	1	49	-				
FORSYTH	2	86	2747	31.3		51	1137	44.9		ASHEVILLE	1	15	647	23.5	2	14	236	59.3			
FRANKLIN	1	6	190	31.6		14	262	53.4		BUNLINGTON	1	11	590	18.6	12	137	87.6				
GASTON	5	69	2530	27.3		1	33	496	66.5	CHAPEL HILL	1	5	321	15.6	4	55	-				
GATES	2	49	-			4	83	-		CHARLOTTE	6	77	3158	24.4	9	88	2027	43.4			
GRAHAM	2	103	-			2	13	-		CONCORD	1	8	205	39.0	8	114	70.2				
GRANVILLE	1	7	233	30.0		2	12	367	32.7	DURHAM	1	18	921	19.5	3	46	838	54.9			
GREENE	4	103	-			8	150	53.3		EDEN	3	207	-		1	50	-				
GUILFORD	6	98	3911	25.1		8	83	1606	51.7	ELIZABETH CITY	2	162	-		2	98	-				
HALIFAX	11	402	27.4			4	30	606	49.5	FAYETTEVILLE	4	34	948	35.9	1	34	597	57.0			
HARNETT	5	21	544	38.6		12	321	37.4		GASTONIA	1	23	805	28.6	1	14	206	67.3			
HAYWOOD	1	23	670	34.3		1	13	-		GOLDSBORO	1	11	339	32.8	2	19	261	72.8			
HENDERSON	1	23	655	35.1		2	51	-		GREENSBORO	4	47	1886	24.9	4	54	939	37.5			
HERTFORD	10	125	80.0			1	17	249	68.3	GREENVILLE	1	9	328	27.6	11	185	59.5				
Hoke	3	108	-			1	243	-		HENDERSON			123	-	9	140	64.3				
HYDE	2	37	-			4	47	-		HICKORY	1	15	363	41.3	3	97	-				
IREDELL	3	30	953	31.5		18	333	54.1		HIGH POINT	21	830	26.3		4	20	450	44.4			
JACKSON	1	7	307	22.8		1	59	-		JACKSONVILLE	3	13	434	30.0	1	6	225	26.7			
JOHNSTON	2	27	756	35.7		20	336	59.5		KINSTON	4	9	299	30.1	1	6	225	26.7			
JONES	2	85	-			1	3	74	-	LENOIR	5	216	23.1		3	57	-				
LEE	5	406	12.3			5	167	29.9		LExINGTON	2	11	260	42.3	2	6	88	-			
LENOIR	5	18	609	26.6		2	17	431	39.4	LUMBERTON	1	6	191	31.4	10	211	47.4				
LINCOLN	13	541	24.0			1	5	95	-	MONROE	6	128	46.9		6	83	-				
MCDOWELL	1	22	539	40.8		4	45	-		NEW BERN	1	5	160	31.3	5	119	42.0				
MACON	6	225	26.7			1	9	-		NALIEGH	4	30	1842	18.3	2	35	582	80.1			
MADISON	2	9	235	38.3						REIDSVILLE	1	4	187	-	5	102	48.0				
MARTIN	6	200	30.0			13	249	52.2		ROANOKE RAPIDS	7	101	38.7		4	41	-				
MECKLENBURG	12	128	4665	26.3		10	99	2357	42.0	ROCKY MOUNT E	3	111	30.5	1	6	148	44.8				
MITCHELL	6	215	27.9			1	1	-		ROCKY MOUNT N	8	250	34.5		5	97	-				
MONTGOMERY	1	8	255	31.4		8	105	76.2		SALISBURY	7	203	34.5		6	141	42.6				
MOORE	1	21	466	45.1		2	13	249	52.2	SANFORD	3	187	-		2	75	-				
NASH	14	592	23.6			1	23	519	44.3	SHELBY	5	180	27.8		2	8	129	82.0			
NEW HANOVER	7	28	1236	22.7		1	20	375	53.3	STATESVILLE	9	254	35.4		9	139	84.7				
NORTHAMPTON	1	114	-			2	11	296	37.2	THOMASVILLE	7	197	35.5		6	103	38.3				
ONSLow	4	64	2204	29.0		1	20	428	46.7	WILMINGTON	2	13	610	21.3	1	14	318	44.0			
ORANGE	2	14	844	16.6		1	11	230	47.8	WILSON	2	12	301	38.9	1	9	263	34.2			
PAMLICo	1	4	92	-		2	59	-		WINSTON SALEM	50	1435	34.8		46	1076	42.8				
PASQUOTANK	1	7	305	23.0		5	185	27.0													

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more)} + \text{neonatal deaths (under 28 days of life)}}{\text{total live births} + \text{stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

Committee & Commission Appointments, — 1970-1971

NOTE: The Committees listed herein have been authorized by President Louis deS. Shaffner, M. D., and/or are required under the Constitution and By-Laws.

Particular note should be taken of the authorization of the House of Delegates of a Commission form of organizational activity and that all Committees, excepting Committee on Nominations, Committee on Negotiations, and Mediation Committee, are segregated under the respective Commission in which the function of the Committee logically rests. This will tend to eliminate overlapping and duplication in activity programs and result in coordination of the work of the Society in a manner to lessen the work of the delegates in the Annual Meeting of the House of Delegates.

(The President, Secretary and Executive Director of the Society are ex officio members of all committees and, along with the Commission Chairman, should receive notice of meetings, agenda and minutes of Committee meetings during the activity year.)

(Superior figures (e.g. 21) indicate the component County Society from which the member emanates, as in the Membership list of the Roster.)

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|--|-----------|--|
| I. ADMINISTRATION COMMISSION | | |
| T. Tilghman Herring, M.D., CHAIRMAN | | |
| Wilson Clinic | Committee | |
| Wilson 27893 | Listing | |
| 1. Finance, Committee on (I-1) | No. 22 | |
| T. Tilghman Herring, M.D., CHAIRMAN | | |
| Wilson Clinic | | |
| Wilson 27893 | | |
| 2. Headquarters Facility & Planning, Com. on (I-2) | No. 23 | |
| A. Hewitt Rose, Jr., M.D., CHAIRMAN | | |
| 3801 Computer Drive | | |
| Raleigh, 27609 | | |
| 3. Insurance, Com. on Professional (I-3) | No. 27 | |
| John C. Burwell, Jr., M.D., CHAIRMAN | | |
| 1026 Professional Village | | |
| Greensboro 27401 | | |
| 4. Retirement Saving Plan Committee (I-4) | No. 52 | |
| Jesse Caldwell, Jr., M.D., CHAIRMAN | | |
| 114 W. Third Ave., Gastonia 28052 | | |
| 5. Blue Ribbon Committee No. 1 (I-5) | No. 8 | |
| Jesse P. Chapman, Jr., M.D., CHAIRMAN | | |
| 520 Biltmore Ave., Asheville 28801 | | |
| 6. Personnel & Headquarters Operation, Com. on (I-6) | No. 45 | |
| Charles W. Styron, M.D., CHAIRMAN | | |
| 615 St. Mary's Street, Raleigh 27605 | | |
| II. ADVISORY AND STUDY COMMISSION | | |
| Roy S. Bigham, Jr., M.D., CHAIRMAN | | |
| 1708 E. Fourth Street | | |
| Charlotte 28204 | | |
| 1. American Medical Education & Research Foundation, Com. on (AMAERF) (II-1) | No. 1 | |
| A. J. Tannenbaum, M. D., CHAIRMAN | | |
| 1001 N. Elm St., Greensboro 27401 | | |
| 2. Anesthesia Study, Com. on (II-2) | No. 2 | |
| Arthur Albert Bechtoldt, Jr., M.D. | | |
| CHAIRMAN | | |
| UNC Sch. of Medicine | | |
| Chapel Hill 27514 | | |
| 3. Auxiliary & Archives of History, Com. Adv. to (II-3) | No. 6 | |
| Roscoe D. McMillan, M.D., CHAIRMAN | | |
| Box 232, Red Springs 28377 | | |
| 4. Cancer, Committee on (II-4) | No. 11 | |
| Lewis S. Thorp, M.D., CHAIRMAN | | |
| Drawer 1199, Rocky Mount 27801 | | |
| 5. Constitution & By-Laws, Com. on (II-5) | No. 16 | |
| Henry J. Carr, Jr., M.D., CHAIRMAN | | |
| 405 Cooper Dr., Clinton 28328 | | |
| 6. Medical Education, Com. on (II-6) | No. 33 | |
| Richard H. Ames, M.D., CHAIRMAN | | |
| 1018 Professional Village, Greensboro | | |
| 27401 | | |
| 7. Motor Vehicles, Com. Adv. to N. C. Dept. of (II-7) | No. 38 | |
| Jesse Meredith, M.D., CHAIRMAN | | |
| Bowman Gray, Winston-Salem 27103 | | |
| 8. Nursing, Com. of Physicians on (II-8) | No. 42 | |
| John N. Bennett, M.D., CHAIRMAN | | |
| Rt. 1, Moravian Falls 28654 | | |
| 9. Student AMA Chapters in North Carolina, Com. Adv. to (SAMA) (II-9) | No. 55 | |
| C. Douglas Maynard, M.D., CHAIRMAN | | |
| Bowman Gray, Winston-Salem 27103 | | |
| 10. Relative Value Study, Com. on (II-10) | No. 51 | |
| Arthur E. Davis, Jr., M.D., CHAIRMAN | | |
| Rex Hospital, Raleigh 27605 | | |
| III. ANNUAL CONVENTION COMMISSION | | |
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| Duke Univ. Medical Center | | |
| Durham 27706 | | |
| 1. Arrangements, Com. on (III-1) | No. 3 | |
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| Duke Univ. Medical Center | | |
| Durham 27706 | | |
| 2. Audio-Visual Scientific Postgraduate Instruction, Com. on (III-2) | No. 5 | |
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| Box 791, Pinehurst 28374 | | |
| 3. Awards, Com. on Scientific (III-3) | No. 7 | |
| F. M. Simmons Patterson, M.D., CHAIRMAN | | |
| 4019 N. Roxboro Rd., Durham 27704 | | |
| 4. Credentials, Com. on (of House of Delegates) (III-4) | No. 17 | |
| Charles B. Wilkerson, Jr., M.D., CHAIRMAN | | |
| 100 S. Boylan Ave., Raleigh 27603 | | |

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 6. Necrology, Com. on (III-6) No. 39
W. Otis Duck, M.D., CHAIRMAN
Drawer F., Mars Hill 28754
 7. Scientific Works, Com. on (III-7) No. 53
William B. Herring, M.D., CHAIRMAN
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- IV. PROFESSIONAL SERVICE COMMISSION
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1. Blue Shield, Com. on (IV-1) No. 10
James E. Davis, M.D., CHAIRMAN
1200 Broad St., Durham 27705
 2. Hospital & Professional Relations & Liaison to N. C. Hospital Association (IV-2) No. 24
Joe M. Van Hoy, M.D., CHAIRMAN
806 Doctors Bldg., Charlotte 28207
 3. Industrial Commission, Com. to Work with N. C. (IV-3) No. 25
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 4. Insurance Industry Committee (IV-4) No. 26
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1600 N. Main St., Waynesville 28786
 5. OCHAMPUS, Com. on (IV-5) No. 44
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 6. Physical & Vocational Rehabilitation, Com. on (IV-6) No. 47
Edwin H. Martinat, M.D., CHAIRMAN
Bowman Gray, Winston-Salem 27103
 7. Utilization Committee (IV-7) No. 56
H. Fleming Fuller, M.D., CHAIRMAN
Kinston Clinic, Kinston 28501
 8. Advisory Committee to the Crippled Children's Program (IV-8)
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923 Broad St., Durham 27705
- V. PUBLIC RELATIONS COMMISSION
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Wilson Clinic, Wilson 27893
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512 Mocksville Ave., Salisbury 28144
 2. Community Medical Care, Com. on (V-2) No. 14
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 3. Disaster and Emergency Medical Care, Com. on (V-3) No. 18
George W. Watson, M.D., CHAIRMAN
306 S. Gregson St., Durham 27701
 4. Eye Care & Eye Bank, Com. on (V-4) No. 21
Shahane R. Taylor, Jr., M.D., CHAIRMAN
348 N. Elm St., Greensboro 27401
 5. Legislation, Com. on (V-5) No. 28
Edgar T. Beddingfield, Jr., M.D., CHAIRMAN
Wilson Clinic, Wilson 27893
6. Medical-Legal Committee (V-6) No. 34
Julius A. Howell, M.D., CHAIRMAN
Bowman Gray, Winston-Salem 27103
 7. Pharmacy, Committee Liaison to N.C. Association (V-7) No. 46
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Box 708, Dunn 28334
 8. Public Relations, Committee on (V-8) No. 48
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Wilson Clinic, Wilson 27893
- VI. PUBLIC SERVICE COMMISSION
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1. Child Health and Infectious Diseases, Com. on (VI-1) No. 12
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608 E. 12th St., Washington 27889
 2. Chronic Illness, TB and Heart Disease, Com. on (VI-2) No. 13
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211 Hawthorne Lane, Charlotte 28204
 3. Drug Abuse, Committee on (VI-3) No. 19
William A. Robie, M.D., CHAIRMAN
5437 Thayer Drive, Raleigh 27609
 4. Marriage Counselling and Family Education, Com. on (VI-4) No. 29
Eleanor B. Easley, M.D., CHAIRMAN
1821 Green Street, Durham 27705
 5. Maternal Health, Committee on (VI-5) No. 30
W. Joseph May, M.D., CHAIRMAN
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 6. Medical Aspects of Sports, Com. on (VI-6) No. 32
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Wilmington 28401
 7. Medicine and Religion, Com. on (VI-7) No. 36
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Greenville Clinic, Greenville 27834
 8. Mental Health, Committee on (VI-8) No. 37
Philip G. Nelson, M.D., CHAIRMAN
Medical Pavilion, Greenville 27834
- Subcommittees:
- Mental Health Education No. 37-A
C. Vernon, M.D., CHAIRMAN
 - Mental Retardation & Children's Services No. 37-B
Alan Hinman, M.D., CHAIRMAN
 - Alcoholism No. 37-C
Donald E. MacDonald, M.D., CHAIRMAN
 9. Occupational Health, Committee on (VI-9) No. 43
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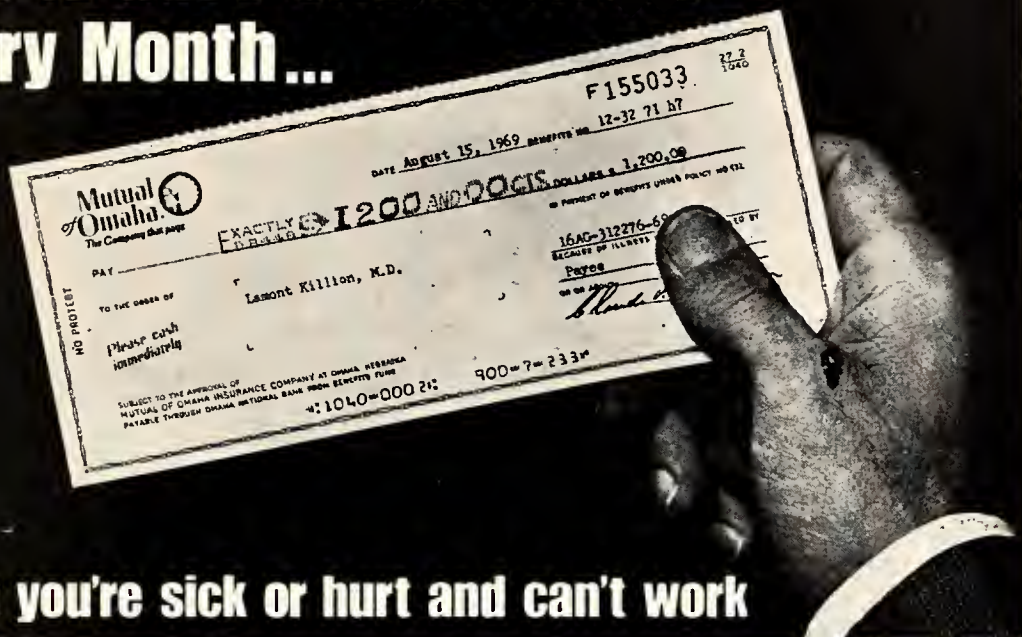
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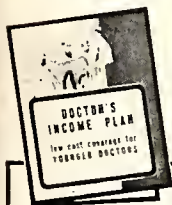
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I don't feel
so good..."**



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with a single dose. Pleasant-tasting Bonine tablets
are chewable. They can be taken anytime,
anywhere, without water. In difficult cases,
multiple daily doses may be necessary
for maximum response.

Precautions: Although the incidence of drowsiness and atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. *Use in women of childbearing age:* In weighing potential benefits vs. risk in women of childbearing age, consider the fact that a review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum.

Supply: 25 mg. scored tablets.

More detailed professional information available on request.



LABORATORIES DIVISION
New York, N.Y. 10017

Bulletin Board

COMING MEETINGS

- Tennessee Valley Medical Assembly Read House,
Chattanooga, Tenn., October 19-20.
American Association for Laboratory Animal
Science, 21st Annual Session- Conrad Hilton
Hotel, Chicago, Nov. 2-6.
National Easter Seal Society for Crippled Children
and Adults - The Palmer House, Chicago, Nov.
4-7.

NEW MEMBERS OF THE STATE SOCIETY

- Thomas Cornelius Suther, Jr., P, Pinehurst Medical
Center Bldg. Pinehurst.
Grace Elizabeth Lindsay, R, 308 Hillcrest Drive,
Lexington 27292.
Billy Lee Ferguson, Pd, 614 Pasteur Drive,
Greensboro 27401.
Tong-su Kim, P, 217 West Park Drive, Morganton
28655.
Gitta Wiessner Jackson (intern-resident) 101 W.
Woodridge Drive, Durham.
Henry Francis Bongardt, Jr., GP 113 Seneca Place,
Charlotte 28207.
James Fredrick Earnhardt, Pd, 2831 St. George
Road, Winston-Salem.
James William Tyson, GP, 202 South Caldwell St.,
Brevard 28712.
David Bryan Sloan, Jr., Oph, 2216 South
Canterbury Road, Wilmington 28401.

NEWS NOTES FROM THE NORTH CAROLINA REGIONAL MEDICAL PROGRAM

Dr. George D. Wilbanks, associate professor of obstetrics and gynecology at Duke Medical Center and director of the North Carolina Regional Medical Program's Cancer Information Services, has accepted a new position as chairman of the Department of Obstetrics and Gynecology at Rush Medical College and Presbyterian-St. Luke's Hospital in Chicago.

Dr. Wilbanks has served as director of gynecologic oncology at Duke and was instrumental in organizing the first Cancer Information Service funded by N. C. RMP, in July, 1968.

New CIS director, effective Sept. 1, will be Dr. James A. Bryan II, associate professor of medicine at the University of North Carolina.

Ten North Carolina hospitals have joined the fourth phase of N. C. RMP's Cardiopulmonary Resuscitation project, and their CPR teams have begun training. CPR is designed to train physicians, nurses, other health professionals, and certain nonmedical personnel in CPR techniques, and to assist hospitals in establishing CPR emergency procedures.

Forty-five hospitals have previously participated in the project. Among the ten additions is Columbus County Hospital in Whiteville, which is new to participation in an RMP funded project. It brings the total number of hospitals participating in one or more such projects to 90.

Since last September more than 150 physicians have sought consultation through N. C. RMP Cancer Information Service. The project operated jointly by the state's three medical schools, was designed as a three-year pilot study in services to physicians.

Its objectives are to assist physicians in providing optimum care for cancer patients through rapid and direct dissemination of specialized information, and to continue the education of physicians by providing new information.

Cancer Information Service was based on the fact that cancer, despite its rank as the nation's number two killer, still remains relatively rare to the average physician in general practice.

As many as 53 specialists at the medical schools are available for immediate telephone consultation. Most recent surveys indicate that 96 per cent of the physicians surveyed responded favorably to CIS. N. C. RMP's was the first such program in the nation.

An extension of N. C. RMP's Cancer Information Service is the Tumor Board Conference, a successful telephone case-conference pilot project undertaken by Duke University and New Hanover Hospital, Wilmington. The conferences have been bi-weekly since last November. Plans are to involve the University of North Carolina and Bowman Gray schools of medicine and other community hospitals.

In the pilot project, two to three pertinent cases are discussed with medical school staff for an hour-long session. The cases, selected by the hospital coordinator, are based upon relative complexity and variation of disease site. Case abstracts, x-rays, pathology slides and other pertinent data are forwarded to Duke prior to the conferences. Five to six consultants are available at each conference.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH SCIENCES

Some 402 students received degrees and certificates from the various schools in the University of North Carolina's Division of Health Sciences in June.

They were distributed as follows: 71 medicine; 64 dental; 50 public health; 122 pharmacy; 77 nursing; and 18 physical therapy.

Dr. W. L. Sugg, a surgeon in the UNC School of Medicine, predicted in May that routine success in heart transplantation awaits the development of a mechanical heart assist device.

"Approximately 150 heart transplantations have been performed so far," he said, "but now most of the recipients are dead."

Dr. Sugg, who is one of the world's foremost researchers in such devices, was a featured speaker at the 21st annual North Carolina Heart Association meeting in Durham.

Other UNC medical faculty members addressing the meeting were Dr. Ernest Craige of the Department of Medicine, who spoke on heart murmurs in children, and Dr. George Johnson of the Department of Surgery, who discussed shock in association with infection.

Dr. Cecil G. Sheps, director of the UNC Health Services Research Center, delivered the 56th commencement address before the graduating class of the Chicago Medical School and University of Health Sciences.

The University at the same time conferred on Dr. Sheps the honorary degree of Doctor of Science, "in recognition of your continuing interest in and support of health care and health education."

Dr. Sheps is a professor of social medicine and a specialist in diagnosing and solving community health problems.

He told the graduating seniors, "Without unrelenting demands from the public, the medical profession will not make its best contribution."

Dr. William R. Stanmeyer of the UNC School of Dentistry has been awarded the U. S. Navy's Meritorious Service Medal for the role he played as the Commanding Officer of the Naval Dental Clinic in Charleston, S. C. from July, 1967 through November, 1969.

A retired naval officer, Dr. Stanmeyer joined the University faculty in January of this year as an associate professor in the Department of Oral Diagnosis and Treatment planning.

Some 46 nurses from 15 states attended the University of North Carolina School of Nursing short course, "Fostering Student Creativity for Faculty in Diploma Schools of Nursing" here June 8-12.

Sponsored by the School's Continuing Education Program, it was funded by the Division of Nursing, Bureau of Health Manpower, U. S. Department of Health, Education and Welfare.

About 43 nurses from North and South Carolina attended another short course, "Introduction to Public Health Nursing Concepts," also offered by the School of Nursing in June. This course was sponsored by the Continuing Education Program in Cooperation with the Public Health Nursing Division of the State Board of Health.

Lady Rama Rau, a pioneer in family planning in India, who visited the Carolina Population Center in May, is a liberal about abortion and thinks it will work in the United States.

"A woman who conceives is an adult and if she does not wish to have a child she ought to have the right to abortion, provided it is early enough," Lady Rau declared.

India has been studying abortion laws for the past three years and efforts are being made to liberalize

the law, according to Lady Rau. There is a bill pending in her country's Parliament for this purpose.

"There is a unanimous feeling that this should be done," she said. "But we do not think that abortion will be particularly effective in our country for the very simple reason that we haven't got enough hospital space or enough doctors and the medical situation is not adequate."

Lady Rau explained the problems of illiteracy and lack of communication in India. Many women in village areas do not have the facility of getting to a doctor or a hospital in time for the abortion to be carried out.

Our proposed law legalizing abortion can take place in the first 12 weeks of pregnancy, but the women in their ignorance will not make calculations in time," she said.

Dr. J. Donald Johnson, UNC School of Public Health, has been awarded a \$10,200 research fellowship from the Federal Water Quality Administration.

Dr. Johnson is an associate professor of environmental chemistry in the School's Department of Environmental Sciences and Engineering.

Dr. Johnson will carry out his research in the chemistry of natural waters in oceanography from August 1970 to September 1971 at the University of Gothenburg, Gothenburg, Sweden in the Department of Analytical Chemistry headed by Dr. David Dyrssen.

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ASHEVILLE, North Carolina

Mrs. Patricia F. Aloia, director of the Medical Records Department, N. C. Memorial Hospital, was recently honored by having a medical records scholarship given in her name.

The Southeaster Conference of Medical Record Librarians gave \$3,500 to the Foundation of Record Education Scholarship Fund of the American Medical Record Association in honor of Mrs. Aloia.

One of the founders of the Southeastern Conference, Mrs. Aloia called the first meeting of the group in April 1944 and has served as its president three times.

* * *

The friends and relatives of the late Scarlett Dolly of Raleigh, a senior at the UNC School of Nursing until her accidental death in September 1969, have established a memorial fund in her honor.

From this fund, awards of \$100 per semester will be made to worthy senior nursing students with financial need selected by the Scholarship Committee of the Nursing School.

* * *

The UNC Division of Physical Therapy sponsored a Pediatric Symposium June 4 and 5. Designed for graduate physical therapists and professional persons in the clinical and education area of pediatrics, it was supported in part by a grant from HEW's Social and Rehabilitation Services.

* * *

Family planning program administrators "out there" came here for a two-day workshop June 15-16 of shirt sleeve exchanges with workers from other parts of the country and members of the Carolina Population Center staff and the UNC faculty.

Instead of going to the program administrators as they have been for the past several months, the family planning directors were invited to Chapel Hill for the period of "reverse consultation."

These "grass roots" administrators shared their expertise with each other—knowledge gained from practical experience in the field daily work with families throughout North Carolina, Kentucky, Pennsylvania and other regions — knowledge gained that will lead to solving many of the complex questions of delivering family planning services to rural populations.

* * *

Dr. Charles L. Herring of Kinston, was elected president of the University of North Carolina School of Medicine Alumni Association at the group's annual meeting here in May.

Dr. Harold L. Godwin of Fayetteville is the Association's new president-elect.

Dr. Lewis S. Thorp, Jr., of Rocky Mount was elected vice president.

Re-elected were Dr. Hugh C. Hemmings of Morganton, secretary, and Dr. James H. Thorp of Rocky Mount, treasurer.

* * *

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Dr. Emery C. Miller, Jr., professor of medicine at the Bowman Gray School of Medicine, recently was named associate dean for continuing education at the medical school.

His appointment was announced by Dr. Manson Meads, vice president for medical affairs and dean, who said the establishment of the new administrative position is in keeping with the objectives of the medical center to expand its services in medical education and medical care.

Dr. Miller, who was appointed to the Bowman Gray faculty in 1955, will be responsible for coordinating and strengthening the medical school's programs for keeping practicing physicians abreast of advancements in diagnostic and therapeutic medicine.

He also will serve as the school's liaison officer with the North Carolinian Regional Medical Program, which is sponsoring a statewide continuing education program involving the three medical schools in the state and the Medical Society of the State of North Carolina.

Dr. Miller said that a primary objective of the project is to design programs to meet specific needs of practicing physicians and to make these programs available in communities where the physicians are located.

* * *

Dr. Robert T. Savage, a practicing anesthesiologist in Winston-Salem for the past two years, has joined the Bowman Gray faculty as instructor in anesthesiology.

A native of Dayton, Ohio, he holds the A.B. and M.D. degrees from the University of North Carolina at Chapel Hill. He was engaged in the general practice of medicine in Winston-Salem for ten years before returning to Chapel Hill in 1966 for residency training in anesthesiology. He was appointed clinical instructor in anesthesiology at the University of North Carolina School of Medicine in 1969.

* * *

Dr. John R. Ausband, professor of otolaryngology, was elected president-elect of the American Broncho-Esophagological Society at the organization's 50th annual meeting in Hollywood Beach, Fla.

He has been secretary of the organization for the past five years.

The society, one of four major national organizations for ear, nose and throat specialists, has 285 members.

* * *

William J. Casey of Arlington Heights, Ill., a member of the Bowman Gray graduating class, recently received the highest honor that can be bestowed on a student by a faculty of the medical school.

He was presented the Faculty Award June 5 at the medical school's annual awards ceremony. Four other students, two faculty members, and a house officer also received special recognition.

The Faculty Award, an engraved plaque, has been presented annually for 13 years to a member of the graduating class who has demonstrated outstanding scholarship and character during four years of medical school.

P. Samuel Pegram, Jr. of Greensboro, a Reynolds Scholar, was the only student to win two awards. He received the Obstetrics-Gynecology Award and the Upjohn Achievement Award. Other student winners were:

—Charles A. Bullaboy of Lexington, Pediatric Merit Award.

—Donald G. Leonard of Tampa, Fla., Annie J. Covington Memorial Award in Cardiology.

—D. Francis Fleming Jr. of Concord, Roche Award.

The students presented "Golden Apple Awards" for excellence in teaching to Dr. Edward D. Bird, associate professor of medicine; Dr. Robert C. McKone, associate professor of pediatrics; and Dr. Isam Felahy, resident in surgery.

Two faculty members were honored by the North Carolina Heart Association at its annual meeting in Durham.

Dr. J. Maxwell Little, professor and chairman of the Department of Pharmacology, received the Silver Medallion for "distinguished service." The Silver Medallion is the association's highest award for volunteer members.

Dr. Robert N. Headley, associate professor of medicine, was awarded the Bronze Service Recognition Medallion.

Dr. Henry S. Miller, associate professor of medicine, completed a one-year term as president of the association.

Dr. Quentin N. Myrvik, professor and chairman of the Department of Microbiology, has been appointed chairman of the Bacteriology and Mycology Study Section of the National Institutes of Health.

Dr. Clark E. Vincent, professor of sociology and director of the Behavioral Sciences Center, recently was re-appointed as consultant and technical adviser to the State Department on Family Planning, Research and Evaluation.

Jimmy G. Harris of Valdese is the recipient of the Outstanding Senior Reynolds Scholar Award, given annually by the Z. Smith Reynolds Foundation to a Reynolds Scholar in the Bowman Gray graduating class. He was presented the \$1,000 award at the Reynolds Scholarship Awards Banquet.

Scholarships were presented to eight college seniors who will enter the Bowman Gray School of Medicine in September. They are Phillip E. Ashburn of Kernersville, Miss Linda C. Bartlett of Raleigh, Jerry W. Biddix of Belmont, Terrance L. Hough of Greensboro, William R. Lambeth of Greensboro,

Richard S. Marx of Durham, Joel B. Miller of Statesville, and Lynn H. Orr, Jr. of Winston-Salem.

Dr. John H. Monroe, associate professor of clinical obstetrics and gynecology, has been elected president of the North Carolina Obstetrical and Gynecological Society. He is director of obstetrics and gynecology at Forsyth Memorial Hospital.

Dr. Frank R. Lock, professor of obstetrics and gynecology, was a visiting professor of obstetrics and gynecology recently at the University of California at San Diego. He lectured on "Endometriosis," "Carcinoma of the Cervix," and "Marital Health and Family Planning."

Mrs. Bonnie Masencup, director of the Medical Record Administration Program of the medical school's Division of Allied Health Programs, was installed as president of the North Carolina Medical Record Association at the organization's annual meeting in Durham.

William R. Brown Jr., a member of the graduating class of the Bowman Gray School of Medicine, was presented the Outstanding Student Paper Award at the 116th annual meeting of the Medical Society of the State of North Carolina.

The award, which includes a \$50 prize, is given annually for the best scientific paper presented during the session for Student American Association Chapters. Brown represented the medical school in competition with students from Duke University School of Medicine and the University of North Carolina School of Medicine.

The award-winning paper was on "Sensitivity Echoencephalography—The Use of Ultrasound in the Investigation of Non-Space-Occupying Intracranial Lesions." It recently won Brown a \$50 third-place award in the American Academy of Neurology's Student Essay Contest.

Dr. Kenneth P. Chepenik, instructor in anatomy, participated in the recent Schering Symposium on "Intrinsic and Extrinsic Factors in Early Mammalian Development" in Venice, Italy. He also presented a paper on "Mitochondrial Function during Normal and Abnormal Mammalian Development" at the Teratology Society's 10th annual meeting.

Dr. M. Robert Cooper, assistant professor of medicine, presented a paper on "Platelet Survival and Sequestration Patterns and Thrombocytopenic Disorders" at a meeting of the American College of Physicians in Philadelphia, Pa.

Dr. Lawrence DeChatelet, assistant professor of biochemistry, participated in a meeting of the American Society for Clinical Investigation May 3-7 in Atlantic City, N. J. He presented a paper on "Leukocyte Glucose-6-Phosphate Dehydrogenase Deficiency."

The Tobacco Institute believes the American public is entitled to complete, authenticated information about cigarette smoking and health.

The American Cancer Society does not seem to agree.

Is the public entitled to complete, authenticated information about research on cigarette smoking and health? The Tobacco Institute thinks it is; the American Cancer Society apparently thinks it is not.

The Tobacco Institute has recently challenged the Cancer Society on a matter of importance to the public—and the public health. The Cancer Society has not accepted this challenge.

On February 5, the Cancer Society called a press conference in the Waldorf-Astoria Hotel in New York City to discuss a research project titled, "The Effects of Cigarette Smoking Upon Dogs." Through the efforts of the Cancer Society, the public was led to believe that this experiment is a landmark achievement which, for the first time, demonstrates that lung cancer, resembling lung cancer in humans, can be produced in animals with cigarette smoke.

The Cancer Society claimed that this result refutes the contention of the tobacco industry that there is no laboratory proof of a connection between cigarette smoking and lung cancer. The Society also said that the findings should have an impact on cigarette smoking and should result in a reassessment of the adver-

tising claims and policies of the tobacco industry.

The Tobacco Institute does not—and the public should not—accept these claims at face value. Here are the reasons:

1. The present accounts of this study are based solely upon information and interpretations provided to the press. The study has not been published in any scientific journal. The findings were not subjected, as such findings normally are, to rigorous independent scientific review.

2. This history of tobacco and health research contains many examples of experiments which were initially hailed as scientific breakthroughs, but on later evaluation proved to be of little significance. Unfortunately, the initial and premature announcement of these experiments makes news, but the later criticism of the work rarely comes to public attention.

3. The Tobacco Institute has requested the Cancer Society, in writing, to permit a thorough independent evaluation of the experiment and its results. We said we would propose as reviewers men of outstanding competence and integrity, with wide experience in areas relevant to the data, who, we believed, would be thoroughly accept-

able to the Society. We also stated that if the Society should, for good reason, reject any scientist we propose, we would nominate a substitute. Finally, we offered to bear the costs needed for this independent analysis.

The Cancer Society has twice rejected this proposal—in letters dated March 12 and April 17.

We continue to hope that the American Cancer Society will permit the examination of this work in the manner we have proposed. If the study is as important as the Cancer Society has represented it to be, the Society should have no hesitation in submitting it for review.

The tobacco industry recognizes and accepts a responsibility to promote the progress of independent scientific research in the field of tobacco and health. In discharging that responsibility, we believe that the industry has spent, and continues to spend, more money for such research than any organization in the United States.

If the Cancer Society continues to deny access to this recent work, we believe this will serve as convincing evidence to the public, lay and scientific, that the data will not support the allegations made at the Society's Waldorf-Astoria conference.

We will be pleased to send the complete text of all correspondence on this matter between the Cancer Society and The Tobacco Institute to any interested individual or group.

The Tobacco Institute

1776 K Street, N.W., Washington, D.C. 20006

FROM THE TOBACCO INSTITUTE

March 20, 1970

Mr. William B. Lewis
Chairman of the Board
The American Cancer Society
219 East 42nd Street
New York, New York 10017

Dear Mr. Lewis:

I have your letter of March 12, 1970. I am greatly disappointed that the American Cancer Society has refused to permit the impartial review of the Auerbach-Hammond data which I requested in my letter of February 27. Since the Society has called upon the cigarette industry to reassess its policies in light of the findings, it is only fair and proper for the Society to permit us to have those findings evaluated by independent experts—and immediately.

You will recall that I propose to nominate as reviewers several well-known scientists highly qualified in the fields of experimental work, tumor pathology and lung diseases. They will all be subject to your rejection for good cause.

Your reasons for denying my request, as I understand them from your letter, are that the formal papers will be published in the very near future and that a study of them will satisfy any scientific or other questions regarding the findings. I do not find these reasons for denying my request at all convincing.

First, publication in a scientific journal will not occur until many months after the Waldorf-Astoria press conference of February 5.

Second, the American Cancer Society at that press conference made serious allegations against this industry and its products. The Society said in its press release that the Auerbach-Hammond findings "should have a significant impact on the smoking of cigarettes in this country, and will probably lead to a reassessment of advertising claims and policies of the cigarette industry." These findings have been widely publicized in newspapers and the medical press. How can the Cancer Society say that serious analysis of the work must be delayed until formal publication?

Finally, the published papers cannot satisfy questions about such matters as the proper interpretation of the pathologic material, the allegation that cigarette smoke produced various effects in the dogs, the validity and adequacy of the experimental design and procedure, and in general whether, as you assert, the experiment "meets the highest traditions and protocol of scientific investigation." These matters can only be resolved by examination of the pertinent data and material.

If the Cancer Society does not accede to my request, we plan to use every means at our disposal to see to it that the medical and lay public are made aware of our respective positions in this matter. Furthermore, we intend to continue to press our request for exposure of this experiment to impartial scientific scrutiny by qualified experts in the manner suggested. If the Cancer Society continues to deny access to the work, I believe this will serve as convincing evidence to the public, lay and scientific, that the Auerbach-Hammond data will not support the allegations made at the Society's Waldorf-Astoria conference.

Yours very truly,



Joseph F. Cullman, 3rd
Chairman of the Executive Committee,
The Tobacco Institute, Inc.

FROM THE AMERICAN CANCER SOCIETY

April 17, 1970

Mr. Joseph F. Cullman, III
Chairman of the Executive Committee
The Tobacco Institute, Inc.
Philip Morris, Inc.
100 Park Avenue
New York, New York 10017

Dear Mr. Cullman:

The Veterans Administration, the American Cancer Society and Doctors Auerbach and Hammond cannot accede to the requests stated in your letter of February 27 and March 20 for an evaluation of the Auerbach-Hammond study on "The Effects of Cigarette Smoking Upon Dogs" by a panel of independent scientists chosen by you.

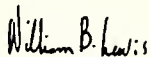
Your request is without precedent in the scientific community. The study under question was the result of three and a half years of diligent and brilliant work by two eminently qualified scientists whose findings have been validated by distinguished pathologists of worldwide reputation. In addition, other leading pathologists, highly regarded by the scientific community, have visited Dr. Auerbach's laboratory, seen his slides and praised the work.

We do not intend to ask that these two eminent men submit their findings to any selected committee chosen by the Tobacco Institute, or any other group. Their work will be judged in the traditional manner of American science, where findings are presented, discussed, accepted or rejected by scientists and physicians whose only motivation is the truth. Doctors Auerbach and Hammond worked freely and without restraint with funds furnished by the federal government and the American Cancer Society. They are beholden only to the scientific community at large and to the integrity it represents.

If the Tobacco Institute, or any scientific research group, has doubts about the findings of this study, the way it was conducted, or the credentials of the investigators, there is a time-honored and scientifically accepted way to proceed. Let your own or another group of scientists repeat the experiments in a laboratory to prove that smoking dogs will not suffer tissue damage, emphysema and lung cancer. The Auerbach-Hammond methodology is readily available to you. And I presume that in the Council for Tobacco Research you have or can set up the mechanism for conducting such a study.

If you carry out your plan to publicize "our respective positions" to the medical and lay public, you have our permission to use this letter as the position paper of the American Cancer Society.

Sincerely,



William B. Lewis

FROM THE TOBACCO INSTITUTE

April 29, 1970

Mr. William B. Lewis
Chairman of the Board
The American Cancer Society
219 East 42nd Street
New York, New York 10017

Dear Mr. Lewis:

Your letter of April 17 states that the American Cancer Society is unwilling to permit an impartial review of the Auerbach-Hammond data by "any selected committee chosen by the Tobacco Institute, or any other group."

You say our request "is without precedent in the scientific community." I submit that the Cancer Society's exploitation of this unpublished work for publicity purposes is truly without precedent in the scientific community. Through its use of publicity techniques rather than the usual scientific channels, it is the Cancer Society—not the tobacco industry—which, contrary to the traditions of American science, has projected this study into the arena of public discussion. Furthermore, in the scientific community, expert review panels are often convened to review important questions which depend upon the interpretation of research results.

You claim pathologists have visited Dr. Auerbach's laboratory, seen his slides and praised the work. Why, then, do you refuse to permit an impartial review by distinguished scientists, especially in view of your claim that this work is of great significance to the smoking public and the tobacco industry?

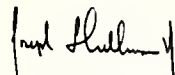
As you say, Doctors Auerbach and Hammond worked with funds furnished by the federal government and the American Cancer Society. Since these are funds derived from public sources, the public is entitled to a full and fair account of the results. The American Cancer Society cannot presume to be the sole custodian and interpreter of the work.

You stated that these scientists "are beholden only to the scientific community at large and to the integrity it represents." But the American Cancer Society, an organization supported by public donations, is certainly also "beholden" to its contributors and to the public at large to provide complete information about the research which it finances, especially in view of the fact that you have released news of the study to the public media. When the Society is questioned about its interpretations of such research, it should feel a responsibility to disclose the data, which, it alleges, supports its interpretations.

You suggest that the way to resolve any doubts about the study is to have another research organization repeat the work—which you say, was conducted over a period of three and a half years. This suggestion overlooks the fact that the American Cancer Society has called upon the tobacco industry to reassess its policies in light of the present findings. If this is the Society's position, it should not expect or want the cigarette industry to go through three and a half years of research to determine answers which the Cancer Society asserts are available today.

In view of the American Cancer Society's position, we are proceeding to bring this matter to the attention of the public.

Yours very truly,



Joseph F. Cullman, 3rd
Chairman of the Executive Committee,
The Tobacco Institute, Inc.

In Memoriam

EDWIN MASON ROBERTSON, M.D.

Dr. Edwin Mason Robertson was born July 10, 1898 in Woodsdale (Person County) and died Sept. 20, 1969, in Durham.

Dr. Robertson entered the University of North Carolina in 1916, and after serving in World War I as a second lieutenant in the United States Army and completing the two-year medical course at Chapel Hill in 1920, he was graduated from the University of Maryland School of Medicine in 1922. His graduate training in surgery (internship and residency) was completed at the Mercy and Baltimore City hospitals.

He began the practice of general surgery in Durham in 1927 and was a member of the surgical staff of Watts Hospital for 42 years. For more than three decades he was a member of the staff of the University of North Carolina Student Health Service, and for 20 years was surgeon in charge of athletic injuries. During the period 1946-1969 he was surgeon for the American Tobacco and Liggett-Myers plants in Durham.

In World War II, from 1942 to 1946, he served first as Lieutenant Commander and then as Commander in the U. S. Navy Medical Corps at the Naval Hospital in Chapel Hill with the Naval Preflight School; with the USS Refugee Hospital Ship in the Atlantic; in the Mediterranean and Pacific theaters of operation; and at the Naval Hospital at Camp Lejeune.

Dr. Robertson was the son of Frances Mason Robertson and Edwin Johnson Robertson, and the grandson of Edwin Johnson Robertson (M.D., Jefferson Medical College, 1840). In 1942 he was married to Isabelle Buckles, who with their two sons, Edwin Mason, Jr. and Maurice Buckles, both students at the University of North Carolina, survives.

Dr. Robertson was a member of the Durham-Orange County Medical Society, the Medical Society of the State of North Carolina, the American Medical Association, the Southeastern College of Surgeons, and the Seaboard Coastline Surgeons. He was a fellow of the American College of Surgeons. He was a devoted member of his church, serving as a member of the administrative board of the Duke Memorial Church, and he was a valuable contributing and supporting participant in many other community activities.

Those who have known Dr. Robertson over the years, as medical colleagues, as friends, and/or as patients would all agree that he was extremely able in his field of medicine, always kind and thoughtful, quiet and considerate, yet always standing firmly and effectively for the highest personal and professional principles.

The University of Maryland Medical School annual for 1924 contains the following discerning comment on him as a medical student:

"Certainly the future could be no brighter for anyone than for Edwin. His unusual pleasing

disposition . . . and the idealistic attitude which he possesses make him one of the best liked and most respected members of our class. It can be fittingly said that he is 'a big man for a big profession.'"

To all who knew him, this he was for the remainder of his days.

Durham-Orange County Medical Society

* * *

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IN THIS ISSUE:

The Doctor's Point of View

LOUIS DES. SHAFFNER, M.D.



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President's Inaugural Address

The Doctor's Point of View

LOUIS DES. SHAFFNER, M.D.

What is wrong with American medicine? Dr. Sidney Lee of Harvard Medical School has a prompt and blunt answer: "Doctors." So reports *Fortune* magazine in its January, 1970 issue, which analyzes all aspects of the cost and delivery of medical care. The editors summarize by saying that much of U. S. medical care is inferior in quality, wastefully dispensed, inequitably financed, and so maldistributed that large segments of the population, especially the urban poor and those in rural areas, get no care at all.

It is all the doctor's fault because he developed the system, controls the admission of patients to it, runs up costs by overtreating them, ends up overcharging them, and refuses to train more doctors fast enough to meet the need.

Granted, demand for services has increased, owing to the population explosion, the enactment of Medicare and Medicaid, the growth of private insurance, and the declaration by someone that good medical care is a right of every citizen.

Granted, too, that costs have risen because of inflation, the manpower shortage, the rise in the minimum wage, payroll taxes, and the tons of paperwork required.

Since the doctors created and run the system, they should be accountable for the way it works.

Similar criticisms continue to come from all sides, the more recent ones being the staff report of the Senate Finance Committee and a nationally televised CBS two-hour documentary.

Inaugural address delivered before the Third General Session, Medical Society of the State of North Carolina, Pinchurst, North Carolina, May 20, 1970.

Requests for reprints to the Department of Surgery, Bowman Gray School of Medicine, Winston-Salem, N. C. 27103.

Importance of the Doctor-Patient Relationship

For years now, members of this Society have tried to speak out on these problems and explain why it is so important for quality medical care to preserve, as much as possible in any system, that one-to-one trust and confidence between the doctor and his patient which we call the doctor-patient relationship.

Sir James Spence¹ has said it well:

The real work of a doctor is only faintly realized by many lay people. It is not an affair of health centers, or public clinics, or operating theatres, or laboratories, or hospital beds. These techniques have their place in medicine, but they are not medicine. The essential unit of medical practice is the occasion when, in the intimacy of the consulting room or sick room, a person who is ill, or believes himself to be ill, seeks the advice of a doctor whom he trusts. This is a consultation, and all else in the practice of medicine derives from it.

This is the doctor's point of view. This doctor-patient relationship is the one thing we warned would be undermined by the demands of Medicare, third-party interventions, rising costs, and all the other outside pressures.

Getting the Message Across

In looking forward to the responsibility of being your President this year, I have been deeply concerned that even now we fail to get across our point of view not only to our critics, but also to our friends, sometimes to our patients, and even to some doctors and some of our current medical students who have yet to experience the responsibilities of patient care.

Less than a month ago, in a friendly group,

I tried again and failed. I remarked afterward to a doctor present, "They still don't understand." His reply was, "And they never will."

A review of the current proposals of solutions for the delivery system of medical care proves that "they haven't yet."

I am reminded of a recent episode in the *Peanuts* comic strip by Charles Schulz.² Snoopy, the dog, is sitting on top of his house typing out a novel.

Here it is:

It was a dark and stormy night. Suddenly a shot rang out. A door slammed. The maid screamed. Suddenly a pirate ship appeared on the horizon. While millions of people were starving, the king lived in luxury. Meanwhile, on a small farm in Kansas, a boy was growing up. End of Part I.

Part II. A light snow was falling, and the little girl with the tattered shawl had not sold a violet all day. At that very moment, a young intern at City Hospital was making an important discovery. The mysterious patient in Room 213 had finally awakened. She moaned softly.

Could it be that she was the sister of the boy in Kansas who loved the girl with the tattered shawl who was the daughter of the maid who had escaped from the pirates? The intern frowned.

Then Snoopy says with a satisfied grin, "See how neatly all this fits together?"—only to have Linus reply, "But what about the king?"

If you have not read this "novel" before, I am sure your first reaction to Linus's question is, "What king?" You would like to hear it again to find out where and in what context the king is mentioned. You have not been as attentive and astute as Linus was.

The point is: many Snoopys have been writing plans for a system of delivery of health care to meet the needs of this nation. Among them we might mention cabinet members, former cabinet members, assistant cabinet members, national economists, insurance actuaries, hospital administrators, comprehensive health planners, a labor leader, and even medical doctors in education and administration who do not themselves render patient care.

Very few of these plans, with all their complexities and facets, include even a mention of the maintenance of the doctor-patient relationship as a factor in assuring quality care. And none of them fits it into the total plan with the emphasis it deserves.

I have been in the same position as our beloved Past President, Daddy Ross. In his

President's Message in the April, 1968 issue of the *Journal*³ he wrote:

"There has been some inquiry as to why there has been no recent 'message' from the President of our Society. The explanation is both simple and complex: The President has been trying to 'get' the message."

And so have I. How can we influence those who would modify our health care delivery system if they cannot see our point of view?

Why Choose a Medical Career?

Part of the message has come from considering why any doctor would choose clinical medicine as his life's work. The answer is basically one of motivation, and even the person who has been so motivated may not understand it fully.

Dr. Arthur Kornberg gave an address to medical students at Utah on "The Basic Motives of a Professional Life."⁴ He said that he had met people who claimed that the prime mission in their professional lives was to help humanity. He concluded that these people were either deluded or dishonest. Rather, he said, the basic motives for any professional man are three, and as expressed by G. H. Hardy, an English mathematician, they are:

First, pleasure in solving problems that provoke intellectual curiosity,

Second, pride in solving these problems with professional skill, and

Third, ambition to be creative and thereby to be an artist instead of a practitioner.

In relating these motives specifically to the principle that the essence of a physician's profession is to dedicate himself to service, Dr. Kornberg said:

I assume that the physician when he performs such service for patients is primarily serving himself. He serves patients because he derives deep personal satisfaction from being of service or because [he makes a living thereby], or most probably for *both* reasons. Obviously, regardless of motive, the patient's comfort or his very life depends on the services of a good physician. Some times physicians engage in teaching or administrative work part-time or even full-time. But these are usually additional forms of community service.

For me, Dr. Kornberg's assumptions are correct. I, for one, practice clinical medicine because I get pleasure in solving the problem presented to me by a sick patient, take pride



LOUIS deS. SHAFFNER, M.D.

in using my skill to do so, and am stimulated while doing so to seek answers to those problems of others which I cannot solve.

In deriving satisfaction from my practice, I render a service to my patients; and, incidentally and fortunately, I make a living doing it.

So it is with many others. When I asked a charter boat captain at Ocracoke why he continued to fish beyond our agreed time, he said, "Because I'd rather be fishing than doing anything else. It's nice to be able to make a living doing what you like most to do." I am sure that the captain sometimes goes fishing by himself, with no thought of a fee.

The same has been true of doctors for years. Why were you who are now practicing willing to borrow money to go to medical school and work without pay during your internship and residency? For the overwhelming majority—and I would hope for all—it was not because you saw it as a way to make a financial killing when you got out in practice. It was because it was what you wanted to do most. It was what you thought would give you the most satisfaction as a life's work. And you had faith that in this work you could repay your debts and make a decent living. Why else would a physician long to treat a charity patient without a fee if he did not derive satisfaction from doing so? I have never heard a doctor say he practiced medicine to fulfill his mission to serve humanity.

Causes of Dissatisfaction

But the other extreme can be most frustrating. One pediatrician, commenting on her tour of service at a hospital said, "We must do something about the ward care at the hospital and about the home life of these patients. Those babies aren't brought in until they are moribund from diarrhea and malnutrition. I have to draw the blood, start the fluids, and work hard to get them over the acute phase. But I know full well they cannot or will not get any decent care at home, and they will come back again with the same thing. I'm fed up. There are only two satisfactions to practicing medicine; giving top notch medical care and getting paid for it. In these cases I don't get either, and the time I spend at it I lose from giving good care in my office."

Neither would the fishing boat captain be happy if some of his clients demanded to be taken to a certain fishing spot which the

captain knew to be a poor one, and then having caught no fish, grudgingly wrote a check to pay him for his time. He would be even more unhappy when he realized that, during this time, he lost an opportunity to take another party to a good fishing spot, get paid for it, and catch some fish as well. Would he not be most unhappy when the check was returned unpaid and marked "insufficient funds"?

Differing Points of View

Experience has shown the doctor that he gets the most satisfaction (because he can work best), when a patient comes to him in confidence, presents a problem, and asks for help. The meeting is a challenge to the doctor, and a hope for relief on the part of the patient.

It is also an implied legal contract between the two, as has been stated many times by the courts. The doctor agrees to render the best service he can because this is the means by which he derives satisfaction from his profession and also makes a living. The patient, on the other hand, agrees to pay the fee because it is the means by which he hopes to get the benefit of the physician's services. The patient cannot share in the doctor's satisfaction in the *rendering of* the service. He can only enjoy the *benefits from* the service. Thus, we cannot expect the patient, or the public in general, to see the doctor's point of view completely or understand his motives. Perhaps the boat captain can. Perhaps the free-lance photographer can. More probably the lawyer or other professional man can.

Let me interject here a thought that may relieve some of your persecution complex. From the patient's point of view, from the health care planner's point of view, and from the public's point of view, the only part of the contract they fully understand is that they pay for the service either directly, or through third parties, or through taxes. Therefore, they are disturbed and unhappy when by paying more, or offering to pay more, they cannot seem to get more service, better service, or service when and where they want it. This is why they have been preoccupied with costs and have tied everything to costs. This is the reason they cannot realize that any national health insurance program alone is not the answer. If we, the physicians, can under-

stand this, we can be more tolerant of their attitude.

Preserving the Incentives

Since the patient and the public in general *cannot* understand our motives, then we must talk to them in terms of incentives that a doctor needs in order to render his best service. These incentives are (1) an opportunity to give good care in a doctor-patient setting, and (2) pay for doing it.

Any plan of delivery of medical care that reduces one incentive will not maintain high quality unless the other incentive is raised. And certainly any plan that lowers both incentives can only result in a reduction in the quality of care.

As for our present system, both incentives are being eroded from all sides. Third parties, both public and private, not only keep us from our work by demanding numerous forms and reports, but also imply to our patients that we overcharge them or treat them unnecessarily. When we render more units of service because of the demand, they accuse us of fraud. At the same time they lower the allowable benefits because they underestimated the costs and the kitty is near empty.

Some patients demand rather than ask for our services, because they think they have a right to them. They accuse us of negligence if the results of our services are not to their liking. They forget that the law still recognizes that a physician may choose whom he shall serve and need not guarantee the results of his services.

Is it any wonder that doctors are "fed up," refusing to see some patients, rebelling at filling out forms, and changing from the long irregular hours and the responsibilities of patient care to the more ordered life of a salaried position? Is it any wonder that young doctors and their families refuse to serve in the rural and urban areas of greatest need where the satisfactions of a family life and the rendering of good patient care cannot be realized, no matter what the financial incentive?

One of our members, after much correspondence about a Medicare patient, wrote to Senator Ervin:

I thank you for your assistance in this despicable circumstance. The Medicare setup has a short memory, however, and I am still getting my

bills deleted, denied, or otherwise dissatisfied. But I have decided not to bring it up any more, but work out the remainder of my contract at the [nursing home] and turn the worries over to someone else. I can't practice good medicine when every case becomes the scrutiny of my integrity. I do not have the time or patience to rebut every case, and I am getting 'too old' to fuss at them after every report.

I regret that the handling of Medicare claims has forced me into this decision. These old folks need the best of medical care surveillance.

I wonder how they will ever get it under Medicare.

The message seems clear. It has two parts, and let us say them loudly and clearly in crisp, distinct words that our patients, the planners, the legislators, and all the public can understand.

First: Money is one, but *not the only* incentive that a doctor needs to render his best medical care. The other incentive is the feeling of satisfaction he can get from rendering this care. We feel that he can get the most satisfaction, and therefore will do his best work, in a system that retains as much as possible the opportunity for a one-to-one doctor-patient relationship. Whatever plan is developed must include these two incentives. If it leaves out either, it will not get the cooperation of the present generation of doctors nor entice young doctors to practice anywhere.

Second: We cannot plan new systems alone. Neither should the planners plan alone. They must let us help them plan. We are the only ones who can judge whether the incentives are there. They may not be able to understand our reasoning, but they must trust us and accept it.

We agree that the monkeys on our backs are the nonmedical parts of our present system. But we do *not* agree with the conclusions in the *Fortune* article. The conclusions were: "Nobody except other physicians should tell physicians how to practice. But the management of medical care has become too important to leave to doctors, who are, after all, not managers to begin with."

We agree with the first part. Yes—only physicians should tell physicians how to practice. But with the second part, we *cannot* agree as written. True, the management problems are too big for physicians alone, but we as *practicing physicians*, must maintain a strong voice in solving these prob-

lems. If we do not, the others will foul up our incentives again, and we will get the blame again.

Systems of Delivering Medical Care

We have felt that the private practice fee-for-service system best satisfies both of our incentives. It is obvious that this system cannot now work effectively for the general masses of our population, because of the forces eroding these incentives, as already mentioned.

This is not the time to compare plans. You have heard suggestions during the general sessions, and a Utopian plan for some future year, perhaps 3001, described by Dr. Kernodle.

Because of current interest, we might make some remarks about prepaid group practice, the Kaiser-Permanente type plan, the one on which the proposed Part C Medicare is based. Do not be deluded. The plan managers themselves admit at least three big faults:

1. It is a select group, and those who do not like it join a fee-for-service plan.
2. Demand for services is enormous, requiring additional unit charges per visit, per x-ray, etc., as deterrents to overutilization. Dr. Sidney R. Garfield, a director of the Kaiser Foundation Health Plan and Hospitals and the originator of the system, says in a timely article:⁵

Picture what would happen to, say, transportation service if fares were suddenly eliminated and travel became a right. What would happen to our already overtaxed airports and what chance would anyone have of getting anywhere if he really needed to? National health insurance, if it were legislated today, would have the same effect. It would create turmoil. Even if sick care were superbly organized today, with group practice in well integrated facilities, the change from 'fee' to 'free' would stagger the system

Not only all doctors, but all health planners, and especially all congressmen, should read Dr. Garfield's entire article.

3. And finally, the doctor-patient relationship is not ideal. Some doctors complain that the patients are too demanding, and some patients complain that the doctors will not listen to them. In an excellent and, I believe, unbiased evaluation of this plan, Donabedian⁶ has written:

Nevertheless, there are two problems that have not been fully solved: How to promote the full

flowering of the professional spirit and how to nurture the sensitive personal relationships between professionals and their clients in complex bureaucracies that are governed by impersonal exigencies of their own. These are, of course, problems not only of prepaid group practice, but of medical care in all organized settings.

Our job, therefore, is to help devise management plans in which we can practice good medicine. At the same time we must work to modify our current systems toward that same goal while these plans are evolving.

This Society took official action at this meeting in Report G of the Executive Council entitled "Need for local physicians to become involved in Regional Health Planning Councils." Our Committee on Comprehensive Health Service Planning pointed out the overload of consumers and the paucity of physicians on the state and regional planning councils, and concluded that "It is very necessary that M. D.'s in this Society involve themselves as individuals in the deliberations and planning of Regional Health Planning Councils."

This Committee report was approved by our Council, sent to the House, and referred out of Reference Committee I with recommendation for approval without change. There was no discussion on the floor, and it passed without a dissenting voice.

Individual and Collective Responsibilities

Now, what are you as an individual doctor in this Society and in this State going to do about it?

I say that your involvement in your regional council is only part of what you should do.

More important is that you involve yourself in your own home town planning council. You need not even have a formally organized council.

Your job is to work in your local hospitals and community planning groups, with your social service department, your health department, your county commissioners, and with other doctors, to devise a local system to get the patient to you; to handle the mechanics of the paper work involved; to enlist, train, and organize the nurses, aides, assistants, and technologists to help you to use your time to best advantage; and to enlist the social workers and community services that are necessary to maintain the health of those you serve. All

must realize that you are still the one who must treat the patient.

The job of your State Society is to help break the bottlenecks at the state and national level that keep you from moving locally.

We need to work with our congressmen and legislators, the Department of Health, the Department of Social Services, and other agencies and individuals to change those laws and regulations that hamper and harass us. We need a legal sanction for the use of physicians' assistants. We need a change in regulations so that money can go for a unit of service to whoever renders it, be it an individual, a group, or an institution.

We need to charge the expense of educating nurses and others to the entire state rather than to the hospitalized patient. We need a vertical system of educational advancement for all health care workers, so we can attract our young people into this broad field, and we need to continue aid to our medical schools and convince their students that their services are needed and that satisfaction can be found in rendering them.

We need to continue to speak out from our collective knowledge on the medical aspects of such public health matters as highway safety, pollution, drug abuse, and abortion.

We must continue, through our claims review committees, to monitor the services we render and charges we make, lest the public we serve hamper all of us further because of the shortcomings of a few.

And in addition to all this, we, as individuals and as a group, must continue our own medical education, so that we can better solve the individual problems of more patients throughout the state.

Conclusion

In these remarks I have tried to carry out the oath of office which I took last night as your President, to uphold the Constitution of the Medical Society of the State of North

Carolina, by encouraging you to reconsider its purposes and act upon them.

The purposes of this Society shall be [among other things] to elevate the standards of medical education and medical service, and to promote friendly intercourse among physicians, and to enlighten and inform the people with regard to the great problems of medical care and public health, so that the profession shall become more capable and honorable within itself, and more useful in the prevention and cure of disease, and in prolonging and adding comfort to life.

Your State Society is your officers, your staff, your commissioners, your committee, your House of Delegates, your county societies, and collectively, *you*. It is made up from you and by you. If this Society is to do its job, it needs your time and talent as well as your dues. We shall be asking you for help. If you have a particular talent or interest to share, or a willingness to work at anything, please let us know, preferably in writing so we can hold you to it.

It is only fitting that I close with Daddy Ross's quotation from St. Matthew: "The end is not yet."

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Transbronchial Brushing Through Bronchoscope In the Diagnosis of Pulmonary and Esophageal Disease

WALTER G. WOLFE, M.D. and WILLIAM W. JOHNSTON, M.D.

It has been clearly shown that the most definitive diagnosis and localization of lung cancer have been achieved by combining roentgenology, bronchoscopy, and cytology.¹ Cytologic examination of fresh early morning sputum yields a greater number of diagnostic specimens than do bronchial aspirations and washings. The greatest disadvantage of cytologic evaluation of sputum alone is its inability to localize the tumor. Bronchoscopy coupled with cytology remains the keystone for localization, visualization, and determination of endobronchial disease. These combined techniques have yielded poor results in tumors confined to the periphery of the lung. Transbronchial brush biopsy has proved to be a valuable adjunct in the diagnosis of these peripheral lung lesions.^{2,3,4} The technique of placing a small wire brush into a lesion or at the site of the lesion under fluoroscopic control has significantly increased the number of cytologic specimens diagnostic of cancer obtained prior to thoracotomy. It has also been helpful in the diagnosis of benign diseases. Certain disadvantages in the brush method have been cited and serious complications reported, even though great care was taken during the procedure under fluoroscopy.⁵

The purpose of this paper is to report the preliminary results of a current study which is being undertaken to determine whether or not the patients with diagnostic cytologic specimens can be increased by placing the bronchial brush through the bronchoscope into the involved lobe or segment in order to obtain materials for cytologic evaluation at the site of the lesion as demonstrated on the chest film.

Materials and Methods

Thirty patients who had a history and roentgenologic findings suggestive of malignant disease were studied from January, 1969 until July, 1969. Twenty-seven of the

patients had pulmonary disease and three had esophageal disease. All patients had routine examinations including posteroanterior and lateral chest films, planograms, and roentgen studies following barium swallow when indicated. Sputums for routine culture, tuberculosis, and fungus were obtained. Skin testing was done for fungi and tuberculosis. Early morning sputum specimens and sputum collected before and after bronchoscopy were submitted for cytologic evaluation. Bronchoscopy or esophagoscopy was done usually with the aid of topical anesthesia. Following examination of the tracheobronchial tree or the esophagus, a wire brush was introduced



Fig. 1. Photograph showing type of brush used. The brush illustrated is a 2.5 mm stainless steel brush with a 36-inch wire. To facilitate accurate placement, the brush is grasped by the forceps and then accurately positioned before advancing. (Obtained from Mill Rose Company, Menta, Ohio.)



Fig. 2. In this patient a pulmonary lesion was visualized above the orifice of the upper lobe. It was thought at bronchoscopy that the lesion was likely not resectable. Biopsy of this area revealed only squamous metaplasia, while brushing the region led to a diagnosis of undifferentiated carcinoma. The patient received radiation therapy.

through the bronchoscope into the appropriate region. After the brush specimen was procured, bronchial washings were obtained and biopsies done of any visible lesions.

In this study the technique of placing the brush is critical. Because the brush is at the end of a long and pliable wire, it cannot be advanced easily and will buckle when it meets resistance within the tracheobronchial tree. For these reasons the brush was inserted by grasping it just below the tip with the biopsy forceps (Fig. 1). When the tip of the brush was in the position desired, the brush was advanced into the bronchus as far as possible. The brush was next withdrawn and placed immediately in 1-2 ml of isotonic saline. The brush, in saline, and the bronchial washings were submitted to the cytopathology laboratory for processing and evaluation.

In order to loosen as much of the cytologic material clinging to the brush as possible, the brush was vigorously agitated in the saline and also had a strong jet of saline from a wash bottle directed against it. From these fresh materials membrane filters were prepared. The preparations were fixed in a 95% ethanol solution and stained by the Papanicolaou method. The slides were screened by cytotechnologists and submitted to a cyto-

pathologist for a final diagnostic interpretation.

The cytopathologic report consisted of a cancer category and a diagnostic comment. The cancer categories were (1) unsatisfactory, (2) no malignant cells seen, (3) inconclusive: cancer cannot be confirmed or ruled out on the basis of this one specimen, and (4) positive: diagnostic for cancer. The purpose of the diagnostic comment was to characterize further the nature of the disease.

Results and Discussion

The findings in the 30 cases studied are shown in Table 1. Of the 17 patients with proven carcinoma of the lung, 14 yielded cytologic specimens diagnostic for cancer. Eight patients had diagnostic specimens of sputum alone or in combination with washings or brushings. Only one patient had a diagnostic sample from bronchial washings. Five patients with negative sputum and bronchial washings had brushings which yielded cells diagnostic for cancer.

Three patients had a bronchoscopic biopsy. Two biopsies were diagnostic for cancer and the third showed squamous metaplasia. However, in this third patient the brush specimen was diagnostic for cancer (Fig. 2).

Table 1
Diagnosis of Pulmonary and Esophageal Disease
In Thirty Patients
30 PATIENTS

Lung Disease	27
Carcinoma of lung	17
Carcinoma of lung with positive cytology before operation	14
Sputum, bronchial washings, bronchial brushings all positive	2
Sputum cytology positive	3
Sputum cytology and bronchial washings positive	2
Sputum cytology and bronchial brushings positive	1
Bronchial brushings positive	1
Bronchial washings positive	1
Carcinoma of lung with negative cytology before operation	3
Benign pulmonary disease	10
Benign pulmonary disease with negative studies	10
Tuberculosis	1
Lung abscess (2 had pulmonary resection)	3
Pneumonic infiltrate (cleared on treatment)	6
Esophageal Disease	3
Carcinoma of esophagus	2
Carcinoma of esophagus with negative biopsy, positive cytology by brush	1
Post op resection for carcinoma of esophagus with negative biopsy at suture line—positive brushing	1
Benign esophageal disease	1
Chronic esophageal disease and achalasia with negative brush and biopsy	1

There were no false positive cytologic diagnoses of cancer. In 17 cases of proven lung cancer only three patients did not yield a diagnostic cytologic specimen, and in these three a diagnosis of malignancy was made at thoracotomy. Of these 17 patients, 5 were treated with radiation (Fig. 3), 4 had thoracotomy without resection and then received radiation, 3 underwent pneumonectomy, and 5 had a lobectomy (Fig. 4).

In the group of ten patients with negative cytologic studies, two underwent lobectomy for resection of lung abscess, one was found to have tuberculosis, and six had satisfactory clearing of pneumonia with appropriate antibiotic treatment.

Of equal importance are the results in the three patients with esophageal disease. One patient evidenced characteristics of esophageal carcinoma on barium examination, but a biopsy taken elsewhere had failed to

reveal cancer (Fig. 5). On biopsy here only normal esophageal mucosa was seen. The brush was inserted through the constricted region and a cytologic specimen thus obtained was diagnostic for carcinoma. The second patient had a previous esophageal resection for carcinoma and returned with stricture at the anatomic site thought to be recurrent disease. Biopsy of this region failed to reveal carcinoma. A brush passed through the stenotic area yielded cells diagnostic for cancer. The third patient had chronic esophageal disease, and both biopsy and brush material were negative. At the time of corrective surgery no evidence of malignancy was demonstrated.

Conclusion

The preliminary results of this study show that the use of the bronchial brush with the



Fig. 3. This patient was admitted in severe respiratory distress. Chest film revealed a mass in the right lung with constriction of the trachea (arrow). Bronchoscopy revealed narrowing of the trachea. The carina could not be visualized. Brushing through the narrow segment and examination of tissue led to a diagnosis of squamous-cell carcinoma. Radiation therapy was begun immediately.

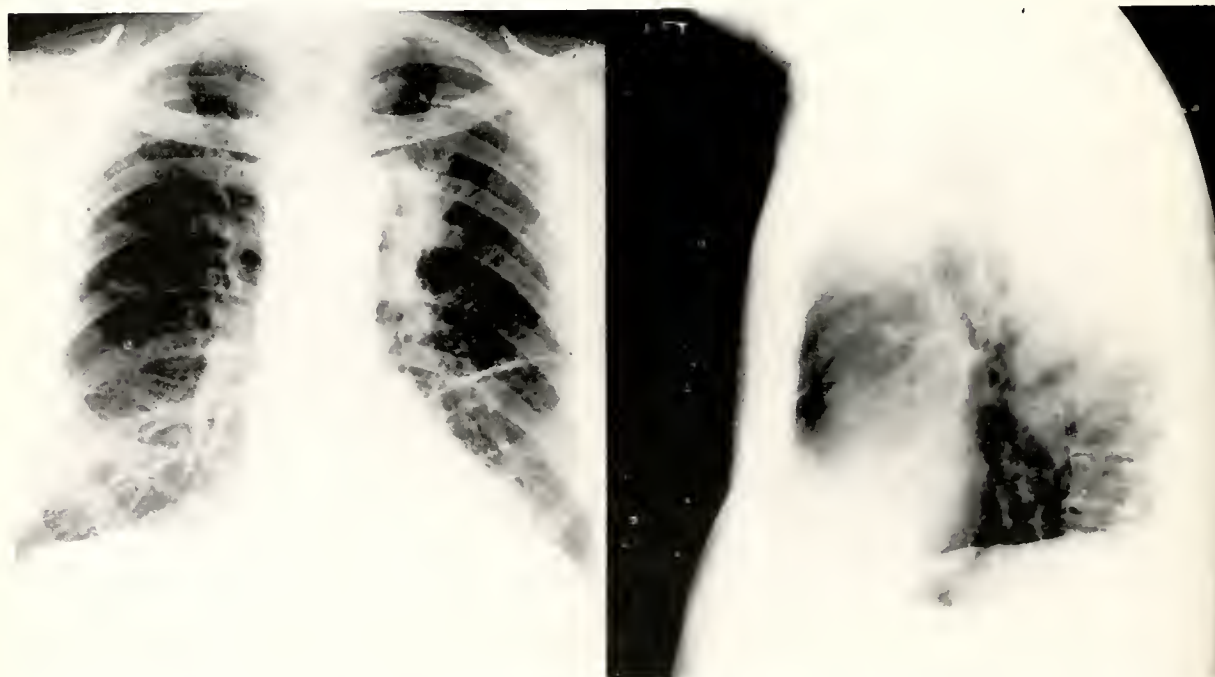


Fig. 4. This patient underwent left upper lobectomy after brushings at bronchoscopy and cytologic examination indicated squamous-cell carcinoma.

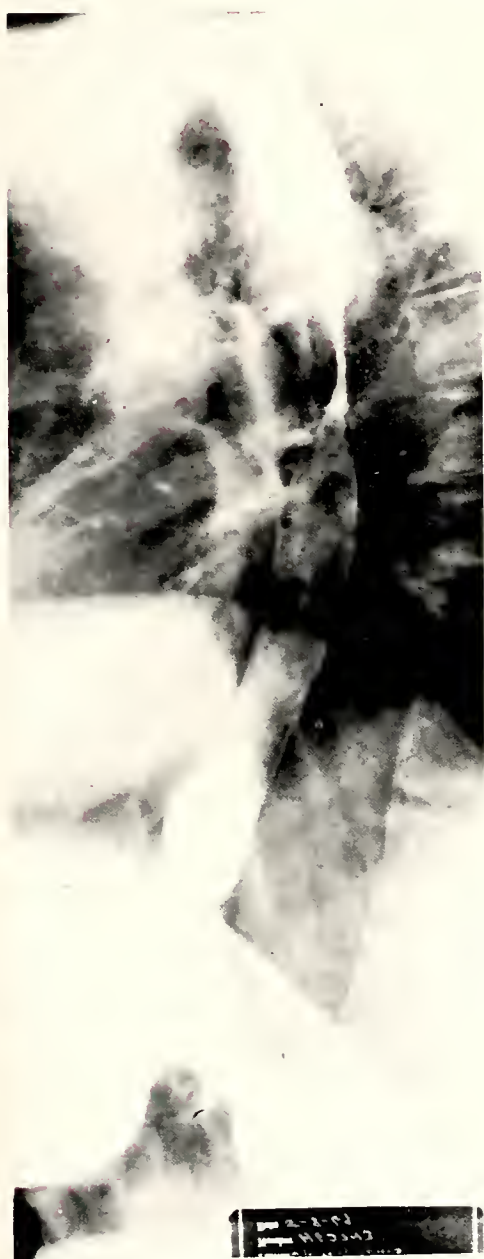


Fig. 5. This 71-year-old patient was referred for diagnosis and radiation therapy for carcinoma of the esophagus. Biopsy done previously at another hospital was negative for carcinoma. Repeat esophagoscopy and biopsy on admission here returned only esophageal mucosa. A brush placed through the stricture returned tissue for cytologic study and a diagnosis of squamous-cell carcinoma was made. Radiation therapy was instituted.

bronchoscope for the purpose of obtaining specimens for cytologic evaluation in cases of suspected malignant disease is a valuable technique for increasing the number of positive specimens obtained prior to operation. In addition, no complications were noted in our patients following endoscopy or from placing the brush in the involved area. The quality of the specimens obtained from the brush was excellent.

In the total group of patients with carcinoma, use of the brush at the time of bronchoscopy increased the number of diagnostic cytologic specimens from 9 to 14. Of equal significance are the results achieved by using the brush at the time of esophagoscopy for diagnosing difficult stenotic lesions of the esophagus.

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Disk Susceptibility Antibigrams

A Survey of Bacteria Commonly Isolated at North Carolina Baptist Hospital

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JOSEPHINE LINEHAM, B.S.

Several years ago Bauer *et al*¹ introduced a standardized, single-disk method for testing bacterial susceptibility to antibiotics which rapidly found widespread use in this country. The method has been employed in our clinical microbiology laboratory for the past 21 months (July, 1968 through April, 1970). During this period the disk susceptibility antibigrams of a total of 11,220 clinical isolates of the most commonly encountered bacteria were tabulated and computed on three separate occasions: in January, 1969, October, 1969, and, most recently, in April, 1970. The purpose of this study was twofold. First, the data obtained were communicated to the clinicians in order to inform them of the prevalent microbial susceptibility rates. Second, an attempt was made to discern any significant change of microbial susceptibility to those drugs that are being used extensively—as, for example, kanamycin sulfate.²⁻⁴

Materials and Methods

Organisms. The isolates were identified according to conventional criteria. Specifically, micrococcal isolates were examined for coagulase and DNase production and fermentation of mannitol. Beta-hemolytic streptococci were tested for sensitivity to bacitracin, in which case they were reported as presumptive group-A beta-hemolytic streptococci. Alpha-hemolytic streptococci were characterized by their resistance to optochin. Enterococci were identified through reduction of methylene blue milk and fermentation of mannitol. Lactose-fermenting enterobacterial isolates were examined for the following: gelatin liquefaction, H₂S, motility,

indole, methyl red, acetoin production, citrate utilization, and lysine and ornithine decarboxylase production. Non-lactose-fermenting *Enterobacteriaceae* were subjected to the following additional tests: hydrolysis of ONPG, acid and gas production in glucose, fermentation of arabinose and inositol and production of urease and phenylalanine deaminase. Non-fermenting gram-negative rods were tested additionally for oxidase, oxidation of glucose, maltose, and xylose, reduction of nitrate, and production of pigments.

Disk susceptibility tests. These were performed precisely as described by Bauer *et al*,¹ using Difco-manufactured, high-content disks and Difco Mueller-Hinton agar. A strain of *Staphylococcus aureus* and *Escherichia coli* of known antibiotic susceptibility were tested once weekly to monitor antibiotic disks. The diameters of the zones of inhibition, including the disk, were measured in millimeters with calipers and recorded. The disks had a diameter of 6 mm; thus, readings of 6 mm meant no visible zone of inhibition. Organisms were designated as sensitive, equivocal, or resistant to a given antibiotic/chemotherapeutic agent and reported as such to the clinicians.^{1,5,6} Zones of inhibition around gentamicin sulfate (10 microgram disks were interpreted as follows: *Micrococcaceae*, *Streptococcaceae*, and *Enterobacteriaceae* were scored as sensitive to the drug if the zones of inhibition measured 15 mm or more in diameter; *Pseudomonadaceae* yielding zones of inhibition of at least 12 mm in diameter were designated as sensitive to gentamicin.⁷

Results and Discussion

The results obtained with 11,220 clinical isolates are listed in tables 1 through 5; the data are recorded as percent sensitive to a given antibiotic/chemotherapeutic agent. The clinical sources of the most common isolates are shown in table 6.

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Table 1
Antibiograms of Micrococcal and Streptococcal Isolates

Organism	No.	Time	Cephalo- thin	Chloram- phenicol	Erythro- mycin	Genta- micin	Kana- mycin	Linco- mycin	Methi- cillin	Neo- mycin	Peni- cillin	Strepto- mycin	Tetra- cycline
<i>Staphylo- coccus aureus</i>	360	1/69	96*	94	89	—**	88	89	88	95	18	83	80
	450	10/69	94	96	88	>99	89	83	94	88	23	78	77
	440	4/70	96	97	88	>99	91	93	94	91	22	78	78
<i>S. epider- midis</i>	120	1/69	97	87	79	—	91	85	70	96	19	79	55
	280	10/69	97	82	79	>99	77	85	87	87	20	68	42
	360	4/70	97	88	85	100	86	90	93	91	22	77	54
Beta-hemo- lytic <i>Strep- tococcus</i> (including non-group A)	79	1/69	98	100	100	—	0	96	—	—	87	0	86
	72	10/69	99	100	97	—	9	—	—	—	91	27	92
	72	4/70	97	97	99	—	5	86	—	—	71	16	72
Alpha-hemo- lytic <i>Strep- tococcus</i>	155	4/70	93	99	94	—	12	88	—	—	74	23	71

*Numbers listed represent percentage sensitive to antibiotics/chemotherapeutic agents.

**Not done.

The *Staph. aureus* isolates remained remarkably sensitive to cephalothin (Table 1); their susceptibility to chloramphenicol, erythromycin, kanamycin, lincomycin, neomycin, streptomycin, and tetracycline was essentially unchanged throughout this 21-month period. The increase in sensitivity of these isolates to methicillin is misleading; several batches of methicillin disks were received during the period of July, 1968 through December, 1968 that proved rather problematic. The finding that 6% of the latest isolates proved resistant to methicillin is in agreement with the observation of Finland and co-workers.⁸ It is well-known that isolates of *Staph. epidermidis* tend to be more resistant to penicillin G, the newer semi-synthetic penicillin derivatives, and other antibiotics,⁸ a fact also borne out by our data. The antibiograms of beta-hemolytic streptococci include those for group-A as well as non-group-A streptococci (Table 1); however, all group-A beta-hemolytic streptococci were sensitive to penicillin G. Alpha-hemolytic streptococci, from sources other than respiratory tract specimens, were moderately sensitive to penicillin G; otherwise their antibiograms closely correspond to those of beta-hemolytic

streptococci.

The antibiograms obtained for enterococci (Table 2) were not remarkable; essentially all isolates were sensitive to ampicillin, confirming the findings of others.⁹ Only 1 of 404 isolates of *Hemophilus influenzae* was resistant to chloramphenicol (Table 2). During the beginning of this study, difficulties were encountered with several batches of ampicillin disks; furthermore, the standardization of *H. influenzae* inocula was unsatisfactory. Rigid control measures minimized the number of false-resistant isolates. A small number of strains yielded no zone of inhibition around ampicillin disks, even upon repeated testing; however, all of these isolates were derived from respiratory tract specimens.^{10,11}

The data obtained with isolates of *Escherichia coli*, *Klebsiella pneumoniae*, various species of *Enterobacter*, and *Serratia marcescens* (Tables 3 and 4) were consistent with those published in the literature.^{4,12-20} Contrary to the findings of the Seattle group of workers,² no decrease in the resistance of enterobacterial isolates was detectable with the exception of *E. coli*, in which case a slight increase in susceptibility to ampicillin, cephalothin, nalidixic acid, and sulfonamides was noted. A general trend toward increased resistance to tetracycline

Table 2
Antibiograms of Enterococci and Hemophilus Influenza*

Organism	No.	Time	Ampi- cillin	Cepha- lothin	Chloram- phenicol	Erythro- mycin	Genta- micin	Kana- mycin	Peni- cillin	Poly- myxin	Strepto- mycin	Tetra- cycline
Enterococci	160	1/69	99	27	88	46	—	6	2	—	1	44
	440	10/69	98	37	89	58	—	10	8	—	3	27
	280	4/70	99	52	90	68	34	6	19	—	3	29
Hemophilus influenzae	80	1/69	86	83	100	—	—	96	—	97	95	93
	240	10/69	90	80	100	—	—	83	10	99	87	96
	84	4/70	97	83	99	—	—	85	10	99	81	94

*See Table 1 for explanatory footnotes.

Table 3
Antibiograms of Escherichiae and Klebsiellae*

Organism	No.	Time	Ampi- cillin	Cepha- lothin	Chloram- phenicol	Genta- micin	Kana- mycin	Nalidix- ic acid	Neo- mycin	Nitro- fran- toin	Poly- myxin B	Strepto- mycin	Tetra- cycline	Triple sulfon- amide
Escherichia coli	580	1/69	71	80	92	—	90	86	—	95	99	64	55	75
	950	10/69	73	81	97	99	86	95	82	97	99	63	45	74
	710	4/70	83	85	97	>99	90	97	84	96	99	57	30	97
Klebsiella pneumoniae	410	1/69	5	86	85	—	80	68	—	—	97	63	65	40
	890	10/69	7	87	86	>99	80	82	80	73	99	59	42	77
	500	4/70	9	89	89	100	87	85	81	67	99	58	30	84
Entero- bacter cloacae	41	1/69	5	5	63	—	87	—	—	—	97	66	65	—
	170	10/69	9	7	84	100	74	94	—	94	98	59	44	77
	77	4/70	9	1	85	100	80	91	74	90	99	61	55	80
Atypical E. cloacae (Padlewskia)	25	10/69	12	96	100	100	100	100	93	96	96	88	60	91
E. cloacae	14	4/70	14	93	100	100	93	100	93	86	93	79	86	93
E. hafniae	16	10/69	13	6	88	—	94	72	—	67	94	82	44	100
Enterobacter aerogenes	84	1/69	7	14	88	—	89	—	—	—	88	58	46	—
	208	10/69	11	8	98	97	92	95	70	82	94	68	48	89
	74	4/70	8	8	95	96	83	92	82	72	95	61	22	94
E. lique- faciens	43	10/69	7	9	76	—	92	—	—	—	94	57	29	—
	18	4/70	22	6	94	100	94	94	94	61	89	72	0	89
Enterobacter spp.	169	4/70	12	10	88	100	69	88	65	80	99	55	25	79
Serratia marcescens	42	1/69	0	2	40	—	91	—	—	—	28	76	8	—
	126	10/69	6	1	88	100	94	94	94	5	31	72	8	87
	87	4/70	3	1	92	100	93	94	92	0	29	74	2	89

*See Table 1 for explanatory footnotes.

Table 4
Antibiograms of Proteae and Providencia*

	No.	Time	Ampi- cillin	Cepha- lothin	Chloram- phenicol	Genta- micin	Kana- mycin	Nalidix- ic acid	Neo- mycin	Nitro- fran- toin	Poly- myxin B	Strepto- mycin	Tetra- cycline	Triple sulfon- amide
Proteus vulgaris	64	10/69	0	6	60	96	97	86	89	14	4	84	26	73
	12	4/70	17	17	67	92	92	90	90	8	0	75	17	80
P. mirab- ilis	250	1/69	94	93	76	—	91	83	—	3	1	88	3	87
	380	10/69	95	88	93	98	91	92	95	4	2	92	1	83
	168	4/70	97	94	96	100	91	94	89	3	2	90	2	88
P. mor- ganii	39	1/69	13	13	51	—	85	90	—	5	10	45	46	50
	84	10/69	1	1	80	100	82	94	—	16	1	77	68	23
	19	4/70	16	16	68	100	95	100	84	5	0	78	58	53
P. rettgeri	23	10/69	35	22	59	100	85	83	—	5	13	65	0	33
Providencia	33	10/69	36	33	43	100	85	71	100	22	24	33	27	100

*See Table 1 for explanatory footnotes.

Table 5
Antibiograms of *Salmonellae* and Nonfermenting Gram-negative Rods*

	No.	Time	Ampi- cillin	Cepha- lothin	Chloram- phenicol	Genta- micin	Kana- mycin	Nalldix- ic acid	Neo- mycin	Nitro- furan- tolin	Poly- myxin B	Strepto- mycin	Tetra- cycline	Triple sulfon- amide
<i>Citrobacter</i>	82	10/69	23	48	93	100	88	74	90	93	95	56	29	93
<i>freundii</i>	28	4/70	25	18	86	100	71	90	82	86	93	50	32	68
<i>Salmonella</i>	24	10/69	100	100	100	100	96	100	—	82	96	32	65	54
	19	4/70	95	100	95	100	100	100	100	90	100	42	42	53
<i>Pseudo-</i>	600	10/69	1	0	7	>99	2	4	—	0	99	3	3	18
<i>monas</i>	290	4/70	2	0	8	>99	13	4	4	1	99	4	0	29
<i>aeruginosa</i>														
<i>Acineto-</i>	80	10/69	2	1	10	>99	86	68	—	2	98	57	33	63
<i>bacter ani-</i>	80	4/70	13	2	14	>99	71	60	75	1	98	44	17	75
<i>tratum (H.</i>														
<i>vaginicola</i>														
<i>Acineto-</i>	38	4/70	47	18	54	>99	72	64	100	29	92	46	50	70
<i>bacter</i>														
<i>lwoffii (Mima</i>														
<i>polymorpha)</i>														

*See Table 1 for explanatory footnotes

was noticed with *E. coli*, *K. pneumoniae*, *Enterobacter* spp., and *Serratia marcescens* isolates. The resistance of these enterobacterial species to kanamycin sulfate remained stable, despite the fact that several isolates of *E. coli*, *K. pneumoniae*, and *Enterobacter* spp., harbored a resistance-transfer factor (RTF) with antibiotic resistance markers to amino-glycoside antibiotics, which could be transferred to competent *E. coli* K-12 recipients (unpublished data). Of interest were the data obtained for isolates of *Padlewskia* (atypical *Enterobacter cloacae*), in that their antibiograms closely resembled those of *K. pneumoniae*.²¹ Gentamicin sulfate was found to inhibit all of these isolates with very few exceptions, mainly *E. aerogenes*. It was found that the various species of *Enterobacter* did not differ in their antibiograms; for this reason, the speciation of lactose-fermenting *Enterobacter* isolates was discontinued as of October, 1969.

The antibiograms obtained for *Proteus mirabilis* and indole-positive *Proteeae* (*P. vulgaris*, *P. morganii*, and *P. rettgeri*) were typical in that *P. mirabilis* isolates were almost uniformly sensitive to ampicillin and cephalothin, whereas the reverse was true for indole-positive *Proteeae*.²²⁻²⁵

Isolates of *Providencia* (Table) and *Citrobacter freundii* (Table 5) exhibited varying degrees of antibiotic resistance. The *Salmonella* isolates (serogroups B, C, and D) did not appear to carry an RTF;²⁶ one isolate was resistant to ampicillin, while

another isolate was resistant to chloramphenicol. The number of *Shigella* isolates was too small to warrant inclusion in this report.

The antibiograms of the most commonly isolated non-fermenting gram-negative rods, namely *Pseudomonas aeruginosa*, *Acinetobacter anitratus* (*Herellea vaginicola*), and *Acinetobacter lwoffii* (*Mima polymorpha*), are listed in Table 5. As expected, *Ps. aeruginosa* was sensitive to gentamicin and polymyxin only. *A. anitratus* and *A. lwoffii* differed with regard to their susceptibility to ampicillin and chloramphenicol, in that the former were more often resistant to these two antibiotics.

Recently, O'Brien *et al.*²⁷ reported the results of computer-generated plots of disk antibiograms, graphically demonstrating the percentage of strains yielding particular zones of inhibition. This approach is commendable, since one can spot at a glance whether strains of certain bacterial species are either uniformly sensitive or resistant to a given chemotherapeutic agent, or whether certain species are comprised of equal numbers of strains that are sensitive, equivocal, and resistant to the activity of antibiotics, as, for example, many species of *Enterobacteriaceae* with regard to streptomycin and tetracycline.

During the review of the literature it was noted that some authors stressed regional or geographic variations with regard to microbial susceptibility. It certainly is true that those

Clinical Sources of Most Commonly Encountered Isolates

Table 6

(October 1969 to April 1970)

Organism	Blood	CSF	Stool	Urine (clean-voided and catheterized)	Respiratory Tract (throat, nasopharynx, sputum, tracheal aspi- rate, bronchial wash.)	Exudates (wounds, body fluids, infected catheter sites, etc.)
<i>Staphylococcus aureus</i>	5*	1	2	3	51	38
<i>S. epidermidis</i>	7	5	1	19	14	54
beta-hemolytic streptococci	3	3	0	0	—**	94
alpha-hemolytic streptococci	8	5	0	16	—	71
Enterococci	2	2	—	23	14	59
<i>Hemophilus influenzae</i>	4	5	—	0	82	9
<i>Escherichia coli</i>	1	1	—	43	25	30
<i>Klebsiella pneumoniae</i>	2	0	—	24	54	20
<i>Enterobacter</i> spp.	1	0	—	23	57	19
<i>Serratia marcescens</i>	2	0	—	2	78	18
<i>Proteus mirabilis</i>	2	0	—	39	39	20
<i>P. morganii</i>	0	0	—	41	41	18
<i>Citrobacter freundii</i>	0	0	—	34	33	33
<i>Salmonella</i>	7	0	90	3	0	0
<i>Pseudomonas aeruginosa</i>	2	2	—	19	58	19
<i>Acinetobacter anitratum</i> (H. vaginalis)	13	0	—	7	60	20
<i>A. lwoffii</i> (Mima polymorpha)	10	0	—	20	30	40

*Numbers represent percentage of isolates recovered from given sources.

**Not included.

drugs that are used extensively in given hospitals tend to select less susceptible or resistant variants among hospital-associated strains of bacteria, and favor the emergence and propagation of RTF-carrying *Enterobacteriaceae* in the hospital environment. However, one important factor that might contribute considerably to "geographic variation" of antibiograms is the laboratory methodology employed for the identification of clinical isolates. An example are swarming *Proteae*, that is, indole-negative *P. vulgaris* and indole-positive strains of *P. mirabilis*. Likewise, failure to separate *Padlewskia* (atypical *E. cloacae*) and *C. freundii* from other species of *Enterobacteriaceae* might result in misleading antibiograms. For instance, O'Brien *et al*²⁷ did not indicate what tests were used for the identification of enterobacterial isolates. A significant number of their isolates of *P. vulgaris* and *P. morganii* were reported as sensitive to ampicillin, data at variance with our observations. Apparently

these authors' laboratory methods did not allow for precise differentiation among *Proteae*.

Very recently, von Graevenitz²⁸ recommended that any report on antimicrobial sensitivities should include the following: design of tests, methods of interpretation, sources of isolation (in-patients or out-patient), the site of infection, the number of patients, the existence of hospital outbreaks, and if possible strain differences. To this list one might add the suggestion that authors state precisely the methods employed for the identification of bacterial isolates. Furthermore, isolates should be screened for RTF's. Ideally, serotyping of enterobacterial isolates should be performed,^{4,19} as well as phage-typing of staphylococci, and pyocin-typing of *P. aeruginosa*. However, if one were to fulfill all of these criteria, the cost in time and money required for studies of this nature would become prohibitive. This is why we chose not to serotype our enterobacterial

isolates. No attempt was made to separate inpatients from outpatients, since it now is known that there is no significant difference between the antibiograms of isolates from these two groups of patients (J. R. Tillotson, Department of Medicine, Wayne County General Hospital, Eloise, Michigan, 48132; personal communication).

Summary

The antibiograms of a total of 11,220 clinical isolates, comprising the most commonly encountered bacterial species at North Carolina Baptist Hospital, Winston-Salem, were computed on three separate occasions during a 21-month period. The data were analyzed with regard to prevalent rates of microbial antibiotic resistance and changing patterns of antibiograms.

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Perinatal Mortality - A View from the Ivy Tower

ROBERT G. BRAME, M. D.*

I want to stress that the title of my presentation is "A View from the Ivy Tower" rather than "*The View from the Ivy Tower*," for I make no pretense of representing a combined or corporate view from the medical schools. I am not aware of a single idea which would speak for even the majority of medical educators, certainly not for all of them. My views, therefore, are personal ones, acquired first as a practicing physician, and second as an academician.

A Medical Educator's View

First I want to tell you who we are as viewed through the eyes of a medical educator.

You—and I, to a lesser extent—are the front line of medical care in North Carolina. We are in most cases excellent practitioners of both the art and science of medicine; but we are in other instances the poorly informed, outdated, and outmoded deliverers of 1930 medicine in 1970. We are the epitome of humanitarianism, but we are also, in some cases, guilty of failure to respond to the need for change. We have, over the ages, viewed the care of patients who are unable to pay as an honorable and essential part of our obligation to mankind, but we have resisted attempts to modernize our efforts and, with barrel-vision, have viewed that direction as one leading inevitably to socialization. We have, with our skill and humanity, delivered to that segment of the American public which has access to it the highest quality and most benevolent care in the world, but by resisting any break with the traditional practice of medicine, we have caused the public to accuse us of monopolistic practice and of indifference to the health needs of those living outside the circle of affluence.

You and I know that these accusations are not altogether correct; but we also know that

by our silence, our inactivity, and our negative attitudes, we have permitted third-party medicine to gain not simply a toehold, but a firm and sure footing from which there is no retreat. You and I have been joined by a greater array of semi-trained, diffusely directed, but frequently self-sufficient deliverers of medical care to the masses than even our wildest dreams would have permitted only a few years ago. They are called "allied health personnel." It is about these people, their relationship to the traditional practice of medicine, their place in medical education, and finally, believe it or not, their effect on perinatal morbidity and mortality, that I wish to speak.

But first I beg your indulgence for one more brief diversion. I want to tell you who I am, lest you believe I am willing to be more severe with you than with myself.

I live in the Ivy Tower, largely protected from the sometimes cruel realities of medical practice, and in some ways from life itself. I don't treat any so-called charity patients. My assistants—residents and interns—do that for me. I usually make my contribution to the care of the poor by obtaining a federal grant with which I hire four directors, 12 social workers and 20 record-keepers, after which the poor are lucky if they receive anything—but of course we didn't really get the grant for them, anyway. I don't practice much medicine, but it's very difficult for me to understand why you don't want to run my clinic for me. Since we spend all our money on directors and allied health personnel, we can't pay you, but after all, with your big house and car, why should you mind giving a little time to charity?

Do I need to press my credentials further to convince you of my expertise in both the private practice of medicine and the care of the poor?

Before writing me off as a harmless know-nothing, though, don't you and yours ever forget that I and mine are full of ideas, and that we are the authors and co-authors of programs which are later to be crammed down your collective throats. We, just as you,

Read before the Section on Obstetrics and Gynecology, Medical Society of the State of North Carolina, Pinhurst, May 19, 1970.

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are not acting from our own initiative. We, as you, are simply responding to the public demand that we get busy and do something about delivery of medical care to more of the people.

Unfortunately, we are guilty of the same negativism and mental paralysis that you are. I and mine—in medical schools, in federal agencies, in state health departments, in institutions of one sort or another all over this land—are trying to devise means by which medical care may be extended to all those people who do not receive it now, and you can be certain that the plans we devise will include you. Do I imply that the government and medical schools are in cahoots? No; but the government is channeling some of its effort through medical schools, and we all know how nice money is, especially, if it comes from taxpayers.

Matters for Concern

What bearing does all this have on perinatal mortality, allied health personnel, the traditional practice of medicine, and the attitudes of physicians and the public?

Let us review some problems that I consider to be actual and real:

1. Our perinatal mortality is high.
2. Some of that mortality is related to inadequate prenatal and perinatal infant care, or to the total lack of such care.
3. As medicine is currently structured, there are too few physicians to extend one-to-one care to all the population, and the prospect of significant increases in the near future is dim.
4. We are being inundated by social workers, paramedical workers, over-specialized nurses, and kindred spirits, whose purpose, in many cases, is nebulous, whose credentials are inconsistent, and who fill an uncertain need.
5. We do have a substantial need for medical assistants, for by no other means can we efficiently extend the capacity of the physician, but allied health personnel are trained in Ivy Towers, where assessment of need may vary considerably from that of the practicing physician.
6. Both the practitioner and the Ivy Tower physician are losing their leadership role in community health affairs because, while they often are community leaders, they even more

often have found themselves either unwilling partners or leaders in the resistance to programs which are not to their liking.

7. The term "nurse-midwife" is onerous to most of us, but in areas where health care has been extended to more people by the presence of a midwife, perinatal mortality has declined. We should not be misled by the belief that the nurse-midwife has directly effected this improvement, but we would be blind if we did not recognize that the use of these people permitted the physician to take care of the more demanding situations, that it led to more accurate recognition of the high-risk patient, that it in fact did lead to an increase in the tender loving care of most of the patients. While I do not personally support the concept of the nurse-midwife as such, it seems inescapable to me that non-M.D. obstetrical assistants can be utilized effectively by the practicing obstetrician, and if the practicing obstetrician can be freed from much of the burden of routine care, obstetrical and perinatal care can only improve.

8. We are raising, in the medical schools, a new breed of cat. The medical student of today is more socially aware, more concerned about the welfare of his fellow man, and more impatient with the medical establishment. I will agree with some of your responses to this change by quoting Dr. Edward Pellegrino: "There are few abnegations of the humane more blameworthy than incompetence under the guise of compassion." But do not let your dislike for purple shirts, beards, long hair, and cries of compassion lull you into the belief that today's student is a fraud as a scientist. He is not. He is good, sometimes to the point of embarrassment of those of us who attempt to teach him. He is also tomorrow's practitioner, medical society member, and officer.

9. Medicine—specifically obstetrics—has been the whipping boy of public opinion for the high perinatal mortality in this country, while it is quite obviously a monumental social and economic problem for which improvement in medical care is only a partial answer. The physician has stuttered and stammered rather badly—"Who, me?"—rather than making concentrated effort to point out other areas that would lead to improved health and better perinatal figures.

Some Imperatives

What must we do?

First, we can hardly expect medicine to solve every social, political, and economic ill of the ghettos, the rural areas of suburbia, and the have-nots among our citizenry. Racism, poverty, environmental pollution, welfare, housing, the disrupted family, can all obviously affect health and disease. We must not forget that our primary purpose is the practice of medicine. We must, however, be sensitive to these problems and especially where they are deterrents to good health and the privilege of being well-born. By the same token, while we cannot control these factors, we must make every effort to insure that high quality medical care be made available to those who need it, not by evangelism, but by finding ways to be more efficient and to extend our capacity.

We must turn more and more to the advantages of group practice, and we must, at least to a degree, alter the concept of one-to-one doctor-to-patient medicine. We must learn to delegate the less judgmental aspects of medicine to assistants in order to utilize our minds more effectively. It is, after all, what we have in our brains rather than what we do with our hands, the manual aspects of medicine notwithstanding, that gives us value. You, the practicing physician, are still the backbone of American medicine, but if we don't take up the cause, we will soon be outnumbered and meet a fate not to our liking. We must regain the initiative and exert leadership at the local level, and give direction to, rather than to take it from, the medical team; because I believe the medical team, as opposed to the doctor alone, is on its way. It simply must replace the traditional practice of medicine, for there is no other apparent way.

We must be very careful, however, that the members of the team are truly non-M.D. specialists and not simply the products of fragmented institutional programs which have no relation to need. The medical schools, whether they believe it or not, need your

help in determining those programs, and I think they will listen to you when you approach them with sound, positive ideas. Are medical schools attuned to the needs of the practitioner? Unfortunately, not very often, but they can and I predict will be, if a clear and concerted voice is heard from the alumni.

We must recognize that not all we hear from the purple-shirted crowd is hogwash. They are asking the questions that many of the American people are asking, and we must remember that their numbers are increasing as ours are diminishing. They will find ways to implement better delivery of care. While I cannot accept many of their hostile challenges, I must confess that they ask many penetrating and thought-provoking questions about our traditional system.

I ask you now to consider why we have nurses, health officers, social workers and the like, either attempting or actually carrying out the practice of medicine. Is it because the American people don't want or need doctor-administered health care? I doubt it. I think it is because, first, a real need did exist; and second, traditional medicine did not have the wherewithal to meet that need. A vacuum was thereby created, and into it has come a great array of people, some of whom have actually deterred the advancement of good health, often with little direction from formal medicine. They have come in such numbers that we are now in danger of being usurped as the leader of the health care team. Can we not regain that leadership, and guarantee the continuance of scientific principle and humanitarian artistry in the health and welfare of this nation?

Finally, I implore you, not to jump on the bandwagon, but to take the bit in your mouth and lead that wagon into better methods of health care and its delivery. One of the greatest fringe benefits will be the improvement in perinatal mortality.

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The AMA Enters the Significant Seventies

Report of the 1970 Annual Convention

FRANK W. JONES, M.D.

The venerable American Medical Association closed its 119th annual convention in Chicago on June 25 following five days of exposure to intensive postgraduate education, and six days of laborious explorations and planning by the House of Delegates, making decisions on hundreds of reports and resolutions as the A. M. A. entered the 1970s, 123 years from its founding.

As the streaming freeways and the soaring jets took these thousands of people, the providers of medical care in this and other lands, back to their homes, there was an uneasy awareness of the beginnings of the Significant Seventies.

Significantly, when the House of Delegates opened its meetings, it was forced to move the deliberations from a convenient and spacious ballroom to a much smaller assembly area so that order and dignity might be maintained. By providing adequate security to prevent a recurrence of the disruptions perpetrated by those minions of anarchy masquerading as the alleged representatives of certain consumer groups, disturbances were at a minimum.

The AMA provided a special Reference Committee called "J" to give all outside protestants an opportunity to present their allegations regarding health care. This Committee was charged with conveying their comments to the House of Delegates. Sitting with the Reference Committee at this hearing were many members of the Board of Trustees and some of the general officers. The American Medical Association thus provided a forum wherein the people could speak. Significantly, very few reasonable thoughts developed during and from this six to eight hour session. On the other hand, the anarchical antics of those who seized the podium by force prohibited presentations by organizations of the people who may have been there to present a legitimate area of health need.

In fact, clear evidence of disgust, and even more, was displayed by a scheduled representative of a citizens group who was forced to give up his prepared presentation of medical care needs and quickly left the stage after admonishing his brothers in an emotion-filled and almost tearful voice that "this is not the way to get things done." The communications media were present in force at this hearing. Many doubted that this incident would be recounted by television or the press.

Significantly, Medicine and Religion opened their session with a panel entitled "Crises, A Time for Counseling." The general scientific meetings began with a symposium on the "Delivery of Health Care." This was followed by another on "Coma and the Diagnosis of Death." On the following day the general subjects were "Family Life and the Physician"; "Conception Control and Abortion"; "Drug Reactions and Problems," and other medical concerns of today.

Hundreds of physicians and health care personnel delivered papers, participated in panel discussions, presented clinical motion pictures and scientific exhibits in this, the showcase of American Medicine, during the scientific program held at the International Amphitheater. The Industrial Exhibit Section, the glittering midway of products and services, contained approximately 200 presentations. Of more than passing interest was the increasing number of exhibits in the area of computerization and the business side of medicine, demonstrating the application of techniques from the business world in the delivery of health care.

What Did the House Do?

For the purpose of reasonably brevity, only a few of the actions of the policy-making body will be reported. Undoubtedly, by the time this material reaches its reader, the public press and the AMA News will have related much of what went on. The only justification, therefore, for this account is that it represents an "I was there when they were calling the signals" view, and that it will

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be published in the *North Carolina Medical Journal*, thus allowing a degree of latitude in reporting on the actions of the House. Some of the decisions made with reference to the Himler Report and the report of the Ad Hoc Committee on Planning and Development will be omitted, not because they were unimportant, but because others seem to have a little more current relevance and interest, as judged from the murmurings at the grass roots.

On Abortion

This issue was debated somewhat warmly in the Reference Committee and, as a result of correct parliamentary procedure, much more restrainedly on the floor of the House. The issue of "abortion on demand" and the attitude of the House in respect never came to an aye and nay vote. A few of the states and the membership of the societies therein are now confronted with a legal fiat on this matter, without medical community endorsement or legislative participation. Therefore, the issue was modification of ethical considerations in a way that would not place the local M. D. outside of the pale of ethics.

The House said that abortion is a medical procedure and should only be done by a licensed physician and surgeon, in an accredited hospital, in conformance with standards of medical practice and the medical practice act of the state, and only after (formal) consultation with two (other) qualified and competent physicians. Further, the House said that a physician or other professional personnel should not be compelled to perform any act which violates his good medical judgment, and that neither doctor, hospital, nor hospital personnel shall be required to perform any act violative of personally held moral principles.

In slightly more simple language, the House said to the membership and the Judicial Council opined that you are not *prima facie* in violation of medical ethics if you happen to do non-therapeutic abortions within the permitted boundaries of your state law, *but* you must have two consultations from competent M. D. consultants before you perform a demand abortion. Secondly, if your personal ethic tells you that this is improper, then no one can command you to do it; and, further, if the whole O. R. crew walks out on

you because they have moral compunctions, they are within their rights. During the discussion on the floor a clear distinction was made between strictly therapeutic abortions and the other kind.

On Third-Party Use of the Terms "Reasonable" or "Allowable"

The House said that all effort should be made to encourage the use of wording such as "reimbursable portion," or other suitable terminology not conveying moral or ethical connotations. In fact, this was urged.

On Doctor Draft Equivalency

For many reasons the House rejected a proposal that doctors be allowed to satisfy their draft obligation by a voluntary equivalence mechanism, such as serving with the USPHS in rural or inner city areas. Concern was expressed that even at best there would be an absence of permanent and continuing care of patients in the areas concerned, and that the acceptance of such a proposal itself would lead in the future to an ongoing draft of physicians not in any way connected with service to the combat forces of our country.

On Foundations for Medical Care:

The House expressed a decided interest in having the AMA provide guidance in the structure as well as the purpose and function of these organizations. Local and on-the-spot peer review programs were pinpointed as one of the principle functions of most foundation structures, and since such review would be in prospect rather than retrospect, might make fiscal economy more of a likelihood. The action in this connection was to refer Resolution 105 A-70 to the Council on Medical Services for study and report.

On Medical Education

The House took many actions, chiefly having to do with board certification and residency requirements, but also regarding standards in many paramedical areas. Of more than passing interest was information that the free-standing internship was either out or well on the way. Of equal interest were the comments on medical education of incoming President Walter Bornemeier in his acceptance speech, perusal of which is suggested to readers of this report.

On Professional Liability Insurance

The House endorsed the establishment of professional liability claim review committees by medical societies, and stated that each society should determine the composition of these committees, with reference to the local area involved—that is, whether they should be limited to M.D. doctors or made up of physicians, lawyers, and insurance people.

Much testimony was heard in the reference committees and in that greatest of all forums, Conversation Hall, regarding the considerable increase in premiums for professional liability insurance coverage. The Committee on Professional Liability of the Board of Trustees made available the results of a face-to-face survey of key medical staff members in 15 states regarding medical malpractice claims. The establishment of a nationwide professional liability insurance plan under joint AMA and state society sponsorship was adopted with the recommendation that the program be established as rapidly as possible.

On the AMA Dues Increase

The Board of Trustees, backed by audit reports and projections for known future commitments, recommended that the annual dues be increased to \$150.00. This is an increase of \$80.00. In support of this request, several general reasons were cited: to operate new and expanded programs; to pay federal taxes on "unrelated business income" (taxes on advertising in the scientific journals); to maintain the AMAs (financial) reserves as directed by the House of Delegates; to provide for rising operating costs in an inflationary economy, and for other reasons. This Report B of the Trustees projected that the \$80 annual increase would be adequate through the fiscal year ending Nov. 30, 1975. The recommendation regarding the dues increase was discussed vigorously at the open hearing of Reference Committee F. The reference committee in its report to the House recommended that a minimum increase of \$40 be adopted for fiscal year 1970, and that data supporting the need for this and future dues be promptly distributed to all members of the AMA. The House approved the recommendation.

As the machinery of motions and recommendations, programs and projects ground through the House, the group found that they had authorized and directed even more necessary expenditures. As a result, and as a possible small sop to their conscience, the House voted, for economic reasons, to hold the 1972 Clinical Convention in Cincinnati rather than Honolulu, as some would prefer.

On Medical Staff By-laws

The House, among other actions in this area, resolved that the AMA suggest that the medical staffs consider revising their respective hospital staff by-laws to differentiate clearly between medical and administrative duties, and that the AMA inform its members of the functions and the responsibilities of hospital boards of directors. It is also recommended that hospital medical staffs be encouraged to purchase individual subscriptions to *American Medical News* for members of hospital governing boards (who have current informative input only from hospital and administrator oriented publications).

The House heard that the JCAH was now implementing the AMA policy that "Where feasible or where possible, physicians who are either elected, appointed, or nominated by the medical staff and who are willing and able to serve should be voting members of hospital governing boards." Also, it received a report noting that 47% of a sample of 976 hospitals have medical staff representation on their governing boards.

On Peer Review

The current PRO (peer review organization) does not mean "public relations officer," but it might in the sense of the AMA's emphasis on peer review, in all its ramifications, as an effective method of helping control medical costs and other health care expenditures. The House was also aware that governmental people prefer to designate this function as "Professional Standards Review."

On Pollution Control and Environmental Health

The House reaffirmed the AMA's posture of concern in environmental health by pointing out an urgent need for expanded research and effective pollution control measures, and urged that the AMA extend

and intensify its present activities in pollution control and improvement of environmental health.

*On Maintenance by
the States of Anti-substitution
Laws in Prescriptions:*

The House passed overwhelmingly resolutions 58 and 63 which say that repeal of these laws is not in the public interest and that the AMA will actively resist attempts to repeal or modify such laws and regulations.

Planning and Development

Twenty recommendations were made to the AMA in the Himler Report. The report was transferred to an *ad hoc* Committee on Planning and Development and ultimately sent back to the House by way of the Reference Committee. The House changed some of the wording of the charge to the Committee on Planning and Development to conform more closely with current AMA policy and thinking. Further, the House established a standing committee of the House designated as the Council on Long-Range Planning and Development. It will be composed of nine *appointed* members.

Some — not all — of the now standing recommendations of the House are summarized briefly below. The numbers are those carried in the several reports to the House.

I. *The AMA purpose and responsibility was reaffirmed*, as "the promotion of the art and science of medicine and the betterment of public health." This was a somewhat castrated version of recommendation I of the Himler Report.

II. *On delivery of health services.* The AMA recognizes the need for multiple methods of delivering health services, and with reference to incentives there exists a multiplicity of practice options, providing maximum professional independence and freedom of choice for both physicians and patients.

III. *On definition of health.* The Reference Committee and the House rejected the World Health Organization definition of health, which included social disease and the word "complete," and adopted the following: "Health is the state of physical and mental well-being."

IV. *On plans and programs for health care*, the House would have the AMA expand its active role in planning and development for medical care and show an active, innovative, and constructive interest in the nonmedical components of health services.

VII. *On physician's assistants.* The House directed the AMA to formulate a policy with regard to the responsibilities, limitations of service, and supervision by qualified physicians of physicians' assistants. The House further said that the basic responsibility for the medical care of patients cannot be legally or morally delegated. The House stated its opposition to licensing these individuals, but approved in principle certification for PA's, MEDEX, or whatever name they may be called.

VIII. *On forms of medical practice.* The House said that the goal would be achieved by factual investigation and objective experimentation while maintaining full faith, pride, and thrust in the private practice of medicine.

IX. *In speaking to recommendation IX*, the House was concerned about "negotiating" with Government and substituted a policy of having state societies deal energetically with third-party agencies. Further, state associations were urged to establish departments of economic research, with the AMA departments acting as collectors and as a clearing house for the data so gathered.

X. With reference to the monitoring of fees and control of health care costs, the House supported sound existing mechanisms, such as public grievance and adjudication committees, utilization and peer review committees, as the most appropriate agents for consideration of these and other costs.

XIV. *Recommendation XIV dealing with a liaison between the AMA, the Blue plan and HEW* was given the dubious distinction of being "filed" because the AMA was already dealing with the matter on its own motion.

Elections

Wesley W. Hall of Nevada was selected as President-Elect after two run-off ballots following a warmly but gentlemanly contested race involving Drs. Hall, Long, Hendrykson, and Jere Annis.

H. Thomas McGuire of Delaware became Vice President. Speaker Roth of Pennsylvania

and Vice Speaker Walker of Georgia were re-elected. John H. Budd of Ohio, author of the Minority Report on Planning and Development, Richard Palmer of Virginia, James H. Sammons of Texas, and Kenneth C. Sawyer of Colorado were elected to the Board of Trustees to fill the four vacancies.

As this report is being completed, its author is aware he did not stick exactly to

who, what, where, and when. Certainly, many areas of interest for *North Carolina Medical Journal* readers were overlooked. The report was written as things developed or occurred, in hotel rooms and on the return flight, and is closed on June 28. Undoubtedly, the AMA will send, quite soon, a professionally prepared summary to the delegates, but that will be an AMA report.

EDITOR'S NOTE

Shown below is Figure 2 from the paper, "Fiber-Optic Hysteroscopy," by Drs. William B. Norment and Henry Sikes, which appeared in the July issue of this *Journal*. Because the quality of reproduction was unsatisfactory, the illustration is repeated here—with better results. we hope.—Ed.

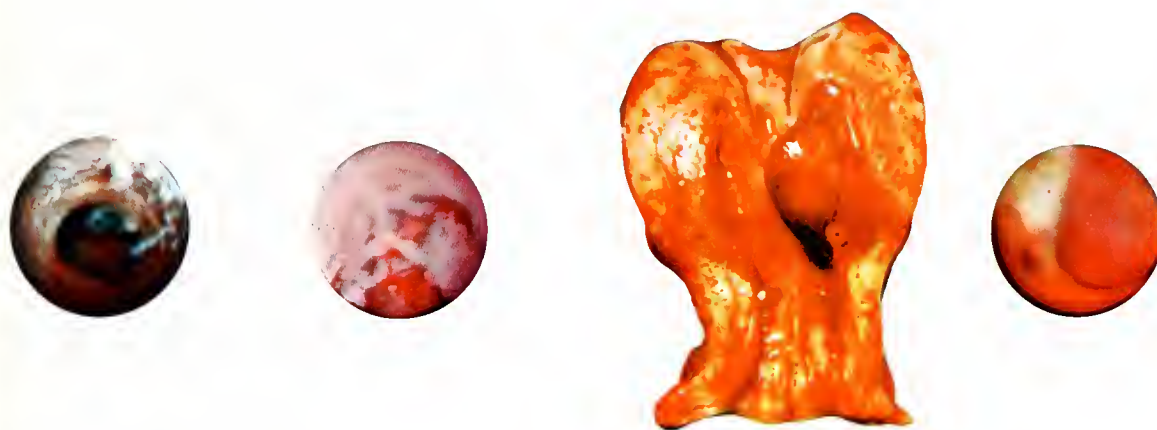


Figure 2

(Left to right) A. A view through internal os looking into uterine canal. B. Photograph of endometrium taken from top of uterine canal. C. Specimen in patient, aged 54, with uterine spotting, showing large endometrial polyp. D. Photograph through hysteroscope previous to surgery showing polyp. The small dark dimple on the left is the opening of the fallopian tube.

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
MARCH 1970 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries Apr. 1969-Mar. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths March 1970	Perinatal Deaths		Total Deliveries Apr. 1969-Mar. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths March 1970		Perinatal Deaths		Total Deliveries Apr. 1969-Mar. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths March 1970	Total Deliveries Apr. 1969-Mar. 1970	Perinatal Rate Per 1,000 Deliveries			
	March 1970	April 1969- March 1970				March 1970	April 1969- March 1970					March 1970	April 1969- March 1970								
NORTH CAROLINA	158	1911	67832	2.8	108	1363	28380	2.1													
ALAMANCE	4	29	1320	2.2	2	27	450	4.4	PENDER		5	120	4.2		6	147	4.1				
ALEXANDER		14	343	4.1			34		PERQUIMANS			71	2.2		2	46	4.3				
ALLEGHANY		2	134	1.5			6		PERSON		8	275	2.9	2	11	199	2.1				
ANSON	1	3	156	1.9	2	22	288	9.7	PITT	1	22	767	3.5	1	37	662	18.9				
ASHE	1	9	324	2.8			2		POLK		2	118	1.7		3	40					
AVERY		10	230	4.3			2		RANDOLPH	5	39	1283	3.0		4	137					
BEAUFORT		8	377	2.1	2	11	257	7.8	RICHMOND	1	21	479	4.4	1	16	295	5.4				
BERTIE		6	91	6.6	1	13	260	3.8	ROBESON	3	23	557	4.1	7	58	1404	24.0				
BLADEN		3	232	1.3	3	10	222	13.6	ROCKINGHAM	2	31	964	3.2		16	390	41.0				
BRUNSWICK	1	10	265	3.8		6	160	3.8	ROWAN	5	33	1176	2.8	1	15	312	4.8				
BUNCOMBE	4	59	2107	2.8	2	14	284	7.0	RUTHERFORD	2	16	739	2.2		9	149	6.0				
BURKE	2	28	956	2.9		1	83		SAMPSON	1	12	404	3.0	1	25	320	7.8				
CABARRUS	3	31	1079	2.9	2	15	283	7.1	SCOTLAND	2	14	302	4.6		10	284	35.2				
CALDWELL	1	41	1113	3.7		7	105	6.7	STANLY	2	19	577	3.3		2	138					
CAMDEN		2	52	3.8			36		STOKES		11	321	3.4		1	43					
CARTERET	2	19	505	3.8		2	71		SURRY	4	33	898	3.7	1	6	57					
CASWELL		1	146	0.7		12	176	6.8	SWAIN		3	91	3.3			71					
CATAWHA	3	48	1523	3.2		8	214	3.7	TRANSYLVANIA		13	300	4.3		2	26					
CHATAM		2	312	0.6	3	11	174	6.3	TYRRELL			28			2	29					
CHEROKEE	3	8	271	2.9		1	12		UNION		18	703	2.6		9	290	35.6				
CHOWAN		1	93	1.1		2	90		VANCE	1	2	319	0.6		21	365	57.8				
CLAY	1	7	78	9.0			1		WAKE	2	56	3051	1.8	5	64	1162	18.1				
CLEVELAND	2	27	987	2.7		22	434	5.1	WARREN	1	3	50			7	155					
COLUMBUS	1	11	503	2.2	1	19	332	2.7	WASHINGTON		3	136			10	148	6.8				
CRAVEN	2	31	1190	2.6		16	381	4.2	WATAUGA	1	11	368	3.0			4					
CUMBERLAND	3	108	3783	2.8	5	61	1376	3.6	WAYNE	2	25	1131	2.2	2	40	578	69.7				
CURRITUCK			57			1	27		WILKES	4	32	855	3.7	1	1	62					
DARE		3	110	2.7			8		WILSON	2	21	541	3.9	1	23	574	40.1				
DAVIDSON	2	47	1448	3.3	1	14	257	5.5	YADKIN	1	6	358	1.7		3	41					
DAVIE	1	6	269	2.2		3	68		YANCEY		5	205	2.4			6					
DUPLIN	1	11	393	2.8	1	14	313	4.1	CITIES												
DURHAM	2	31	1459	2.1	8	50	979	16.2	City totals are also included in county totals.												
EDGECOMBE	2	10	404	2.5	1	42	564	0.7	ALBEMARLE	1	1	136			1	49					
FORSYTH	7	92	2764	3.3	5	55	1144	4.3	ASHEVILLE	1	17	701	2.4	2	12	242	49.0				
FRANKLIN	1	6	188	3.2	3	14	261	13.0	BURLINGTON	2	12	579	2.1	2	12	138	5.7				
GASTON	6	69	2529	2.3	1	33	498	2.0	CHAPEL HILL		6	314	1.9		4	50					
GATES		2	46	4.3			85		CHARLOTTE	8	77	3138	2.4	2	83	2004	41.4				
GRAHAM	1	2	106	1.9			13		CONCORD	1	8	214	3.7		8	112	71.4				
GRANVILLE		6	233	2.6	1	12	374	2.7	DURHAM	1	19	923	2.0	7	47	856	14.3				
GREENE	1	5	99	5.1	2	8	144	14.0	EDEN		4	211			1	53					
GUILFORD	6	96	3883	2.4	8	81	1599	5.0	ELIZABETH CITY		2	158			2	92					
HALIFAX	1	11	405	2.7	1	27	591	4.6	FAYETTEVILLE	1	37	972	3.8	3	34	607	55.0				
HARNETT		16	548	2.9	1	15	320	4.7	GASTONIA	2	24	822	2.9		13	215	60.0				
HAYWOOD		23	683	3.4		1	14		GOLDSBORO		10	334	3.0		18	256	70.7				
HENDERSON	3	24	676	3.5		2	51		GREENSBORO	4	47	1851	2.5	6	52	940	10.2				
HERTFORD	1	10	136	7.4	2	18	263	6.8	GREENVILLE	1	9	334	2.7	1	12	195	61.0				
Hoke		3	105	2.9		1	232		HENDERSON		1	127			9	139	64.7				
HYDE		2	36	5.6		4	40		HICKORY	2	15	371	4.0		4	98					
IREDELL	3	29	953	3.0	2	19	331	5.7	HIGH POINT		21	824	2.6	2	19	444	41.9				
JACKSON	1	6	295	2.0		1	63		JACKSONVILLE	3	12	437	2.7		4	71					
JOHNSTON	3	25	734	3.4	4	21	346	18.5	KINSTON	1	5	302	1.6	3	5	230	11.7				
JONES	1	2	80	2.5		1	73		LENOIR		6	210	2.9		3	56					
LEE		5	407	1.2		5	167	29.9	LEXINGTON		9	257	35.0		4	89					
LENOIR	2	13	599	2.2	5	15	428	26.0	LUMBERTON	3	6	190	31.0	2	10	203	49.3				
LINCOLN	2	13	548	2.4		5	97		MONROE		6	135	44.3		6	80					
MCOWELL	1	22	539	4.1	1	4	44		NEW BERN		4	164			6	120	80.0				
MACON	1	6	213	2.8		1	9		RALEIGH	1	31	1639	1.9	4	40	604	66.0				
MADISON	1	8	236	3.4					REIDSVILLE		3	179			5	100	50.0				
MARTIN	1	7	203	3.4		16	257	62.6	ROANKE RAPIDS	1	7	181	38.7	1	4	41					
MECKLENBURG	12	125	4815	2.6	3	93	2331	23.0	ROCKY MOUNT E	1	3	109	22.0		7	148	12.8				
MITCHELL	1	6	206	2.9			1		ROCKY MOUNT N	2	8	240			7	88					
MONTGOMERY		7	253	2.8		8	112	71.9	SALISBURY	4	7	204	34.3		6	147	47.5				
MOORE	2	25	459	5.4	2	11	240	22.5	SANFORD		3	188			2	73					
NASH	4	14	570	2.4	2	28	494	26.0	SHELBY		5	182	2.1		6	127	47.0				
NEW HANOVER	2	25	1224	2.0	2	20	387	4.1	STATESVILLE		10	263	3.8	2	9	139	64.7				
NORTHAMPTON		1	115	0.9		11	296	3.7	THOMASVILLE		7	191	35.0		6	103	58.2				
ONSLow	9	67	2231	3.0	3	22	453	46.0	WILMINGTON	1	14	587	2.4		2	14	324	47.2			
ORANGE	1	16	834	1.9		10	222	46.0	WILSON		10	294	3.4		9	262	34.4				
PAMLICO		3	89	3.4		2	59		WINSTON SALEM	3	55	1456	3.8	4	50	1080	49.7				
PASQUOTANK		6	295	2.0		5	179	2.8													

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more)} + \text{neonatal deaths (under 28 days of life)}}{\text{total live births} + \text{stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

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Wingate Memory Johnson, M.D.

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AUGUST, 1970

BLACK FLIES

In many ways we North Carolinians live in an ideal, truly temperate climate, but there are occasions when business or curiosity leads us forth into other parts and exposes us to the hazards of other environments. One of those hazards is insects, and some of the insects transcend our coastal mosquitoes in viciousness and in the duration of the souvenirs they inflict. One example is the black fly of the northern parts of this country and of Canada. Natives of those parts say that the black fly will emerge from banks of melting snow and pursue his victim with the fanaticism of the Jap-

anese kamikazes. Still others, out of range of the Chamber of Commerce, admit that such harassment persists until the snowbanks re-form, although others claim a lessening of activity for a few weeks before the snow again falls. Since these beasts are not visible in the photographs of travel brochures, they need to be mentioned in a medical setting and thought of when patients return from the Minnesota or Canadian wilderness bearing strange bites.

Like the buzz bombs of World War II, the black fly causes no trouble when making noise. He may cause your golf ball to do an Agnew on the man in the next fairway, but poses no threat to you. When the buzzing stops the trouble starts. Deep into the flesh goes the leading edge of the fly, leaving either juices or mouth parts to provoke a reaction, both immediate and delayed. The situation might be compared to an attack by highspeed flying chiggers with a set of mosquito glands. Repellants seem to deter the animals, and perhaps 90% are driven off. What the remaining 10% can do is enough. The Queen of England's party, on its recent trip north of the Arctic circle, finally resorted to net-draped hats, and probably wished they had brought along some of that useless armor from the old castle back home.

Keep the beasts in mind when you or patients go north; you might decide to stay home or go south.

IN SEARCH OF ODORLESS LIVING

A few years ago (The All-American Armpit, NCMJ 27:345, July 1966) we commented on a seeming national obsession with smelling good — or at least not smelling bad. In the time since, while a significant part of the population has added stinking to its objectives in life, another segment has apparently moved its concerns down away, south of the umbilicus, and gotten into trouble. Marvelously discreet ads, requiring annotation to be meaningful to some males at least, have let women know that their bottom might be offending someone and that relief is at hand. The relief is, naturally, another one of those ubiquitous

pressurized spray cans, available in a variety of odors, colors and (yes) flavors. While no spray cans were available in Pompeii, that is about the only flaw in comparing the general scene.

At any rate, the inevitable has come to pass and at least one report on vulvar irritation from these preparations has appeared. Dr. Bernard Kaye, writing in the June 22, 1970 *JAMA*, says he has been seeing increasing numbers of women with a reaction to the sprays, involving several brands. He mentions his advice to his patients on taking care of that area—use soap and water. Perhaps too simple to be acceptable, but good sense may prevail with at least some of the people. And even if they use a medicated soap, it is unlikely that the reported sensitization to sun that some such soaps provoke will be a problem in this case—we haven't gone that far yet.

* * *

WHO WRITES OUR EDITORIALS?

Once again, in response to a number of inquiries, our policy about editorial authorship will be stated. Unsigned editorials, following a long-standing journalistic tradition, are those written by the editor. When a member of the editorial board writes one, his initials appear at the end. When a guest editor makes a contribution his full name is attached. Of course, Miss MacMillan applies her healing hand to all parts of the *Journal*, including the editorials. All members of the editorial board are regularly urged by the editor to write for these pages, and these pages and our letter section are open to all readers. Both our editorials and our letters appear in our annual index, and are thus accessible permanently.

* * *

The North Carolina Heart Association is an affiliate of the American Heart Association and is dedicated to the conquest of heart and blood vessel disease through research, education, and community service.

The objective of the Scientific Sessions held as part of the Annual Meeting by the North Carolina Heart Association is to bring the physicians throughout the state up-to-date on the latest advances in the field of heart disease.

Correspondence

GOT IT MADE!

To the Editor:

In this day of inflation, recession and general irrelevance, one must be thankful for small favors. Since it is always easier to point out things for others to be thankful for, I call to your attention the relative non-competitiveness of the world of medical journalism. Among church periodicals, in an annual competition among ninety entries, the *Episcopalian* could only get to third place for best writing and even in general excellence was worth only second place. You folks have got it made!

B. C. Bullock, DVM

STATE BOARD OF MEDICAL EXAMINERS

Revised Regulations Relating to Professional Corporations Organized for the Purpose of Practicing Medicine

The North Carolina State Board of Medical Examiners on May 18, 1970, revised the regulations relating to the organization of professional corporations for the purpose of practicing medicine by eliminating previous requirements that all directors and officers be licensees.

The paragraphs affected by the change now read as follows:

Stock and Financial Matters

1. The chief executive officer of a professional corporation shall be a person duly licensed to practice medicine in North Carolina.

8. If any licensee who is a shareholder or employee of a professional corporation ceases to be licensed by the Board for any reason then his or her employment and financial interest in the corporation must be terminated forthwith. The professional corporation shall report to the board within thirty (30) days after the occurrence the fact that any shareholder or employee has ceased to be licensed by the Board.

The revised regulations supersede all regulations heretofore in effect.

Committees & Organizations

COMMITTEE ON BLUE SHIELD

As required under the Constitution and By-laws of the Medical Society of the State of North Carolina, Chapter X, Section 16, the Committee on Blue Shield "shall announce and hold each year at least four open meetings at which any member of the Society may present items for consideration by the Committee."

Accordingly, at its meeting on June 25, 1970, the Committee scheduled the following meetings:

Sept. 24, 1970, Pinehurst (Medical Society Committee Conclave)

Nov. 19, 1970, Chapel Hill

Jan. 28, 1971, Raleigh

March 25, 1971, Chapel Hill

* * *

NORTH CAROLINA REGIONAL MEDICAL PROGRAM

The North Carolina Regional Medical Program announces that applications for projects to be funded by that organization must be received at its headquarters in Durham by September 11, 1970.

The procedure is that applications be submitted in summary form for review by the N. C. RMP Executive Committee. If the project as outlined is judged to fit the criteria for funding, the applicant will be so notified on October 9, and will then be invited to submit a full, detailed proposal. This proposal will be due November 13.

The North Carolina Regional Medical Program is interested in funding projects which will improve the delivery of health care to the people of North Carolina by combating heart disease, cancer, stroke, and related diseases. Projects should indicate regional, cooperative working relationships with other health care resources. Currently, those projects which propose improvement of the quality, quantity, distribution, and use of health manpower are receiving priority for N. C. RMP funding.

Persons wishing to submit proposals should contact Ben F. Weaver, Deputy Director, for the proper forms and the schedule of the N. C. RMP review cycle, at 4019 Roxboro Road, Durham, N. C. 27704.

The telephone number is 919—477-0461. It should be noted that the federal agency under which N. C. RMP operates will accept proposals only once a year. This is, therefore, the only time that applications can be accepted by the North Carolina Regional Medical Program for processing this year.

* * *

ADVISORY COMMITTEE TO THE CRIPPLED CHILDREN'S PROGRAM

A Committee to Establish Criteria for Rostering Doctors for the Cripple Children's Program has been appointed by the President of the State Medical Society at the request of the State Board of Health. An open meeting of the Committee will be held on Wednesday, September 23, 1970 at 4:00 p.m. at the Mid Pines Club as a part of the Fall Committee Conclave. Members of the Society will have an opportunity to express their views and anyone interested is urged to attend this open meeting.

Jack Hughes, M.D., Chairman
Advisory Committee to the
Crippled Children's Program

Coming Meetings

Greensboro Academy of Medicine and the Greensboro Chamber of Commerce. Public Forum on "Should We Liberalize North Carolina's Abortion Laws?"—Greensboro Public Library, 201 North Green Street, 7:30 p.m., September 10.

Medical Society of the State of North Carolina, Fall Conclave of Committees and Officers—The Carolina, Pinehurst, September, 23.

Medical College of Virginia, Department of Continuing Education, "Basic Mechanisms in Internal Medicine," co-sponsored by the American College of Physicians—Richmond, October 5-9;
Forty-second Annual McKuire Lecture Series, on "Burns" November 5-6.

Tennessee Valley Medical Assembly—Read House, Chattanooga, October 19-20.

North Carolina Chapter, American Academy of Pediatrics, and the North Carolina Pediatric Society, Annual Meeting—The Carolina, Pinehurst, November 13-14.

Department of Radiology, Memorial Hospital Danville, Virginia, Second Annual Radiology and Nuclear Medicine Symposium—Nurses Auditorium, Memorial Hospital, Danville, November 4-6.

Bulletin Board

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

A new academic department, through which students will gain a broad exposure to all systems of medical care, has been established at the Bowman Gray School of Medicine.

Dr. Donald M. Hayes, formerly associate professor of medicine, was named professor and chairman of the Department of Community Medicine. The new department emerged from a reorganization of the Department of Preventive Medicine and Genetics. The changes were effective July 1.

Dr. Manson Meads, vice president for medical affairs and dean, commended the Department of Preventive Medicine and Genetics and its chairman, Dr. C. Nash Herndon, for "distinguished service." Dr. Herndon, who also is associate dean for research development, will continue to head the Section on Genetics, which will be attached to the Department of Pediatrics.

"The medical school has a growing responsibility in helping to solve the health problems of the community," Dr. Meads said. "The new department, with its programs of teaching, research and consultative services, should enable us to more fully meet those responsibilities."

The primary goal of the new department is to prepare students to understand and gain practical experience in dealing with the health problems of the community so that each student can effectively make his contribution to comprehensive health care. Opportunities will be available for students to participate in various systems of medical care in addition to that seen in an academic medical center. Work has been initiated toward setting up training programs in community hospitals in the offices of family physicians, in emergency rooms, and in neighborhood clinics.

The plan is designed to enable students to see how the various categories of health care relate to each other in the total medical care delivery system. Through the plan, the student will have an opportunity to make an early choice of careers and may be attracted to areas where there are critical shortages of physicians.

Dr. Hayes, who was appointed to the Bowman Gray faculty in 1959 and who served two years as assistant dean, has been engaged principally in cancer chemotherapy. He also has had considerable interest in community medicine and has taken special training in that field.

* * *

James L. Ransom, a second-year student at the Bowman Gray School of Medicine, is the first recipient of the Laura Elizabeth Scales Summer Research Fellowship at the medical school.

He will participate in cancer research for three months this summer in the oncology laboratories of the medical school.

The fellowship is sponsored by a memorial fund which was initiated by students of Wake Forest University following the death, March 28, 1969, of the daughter of Dr. and Mrs. James Ralph Scales. Dr. Scales is president of the university.

The fund will support a continuing fellowship program. One Bowman Gray student will be selected each year by a faculty committee for summer participation in the cancer research program.

* * *

Three members of the Bowman Gray faculty presented papers at the annual meeting of the American Medical Association in Chicago.

Dr. Eben Alexander, Jr., professor of neurosurgery, spoke on "Emergency Room Training Programs" during a symposium on Emergency Room Care and Training. Dr. Julius A. Howell, associate professor of surgery, presented a paper on "Congenital Absence of the Vagina" and Dr. Paul M. James, Jr., assistant professor of surgery, spoke on "Use of Central Venous Pressure."

* * *

Dr. Stephen H. Richardson, associate professor of microbiology, has been re-appointed consultant to the National Institute of Allergy and Infectious Diseases. He represents the U. S. Cholera Panel of the U. S. - Japan Cooperative Medical Science Program.

* * *

Dr. Thomas B. Clarkson, Jr., professor and director of the Department of Laboratory Animal Medicine, presented a paper on "Primate Models of Pediatric Atherosclerosis" at the International Workshop on Pediatric Atherosclerosis June 21-23 in Annapolis, Md.

* * *

Dr. Clair E. Cox, associate professor of urology, was a visiting professor of urology recently at the Medical College of Virginia where he spoke on "Therapy of Urinary Tract Infections" and "Renal Carcinoma—Diagnostic Measures and Preoperative Radiotherapy." He also participated in a seminar on Sodium Colistimethate in Morris Plains, N. J., where he presented a paper on "Intravenous Therapy and Pharmacologic Studies with Sodium Colistimethate."

* * *

Dr. Yi-Chi Chang, instructor in pharmacology, recently was awarded a \$500 grant by the Forsyth County Heart Association to further his research on the interaction of native and synthetic polypeptide hormones and adrenergic drugs on the hemodynamic responses in the anesthetized dog.

* * *

Dr. Carlos Rapela, professor of physiology, participated in the U. S.—Japanese Cooperative Seminar on Biophysics and Bioengineering of the Cardiovascular System, held June 8-12 in Pasadena,

Calif. He presented a paper on "Control of Cerebral Blood Flow in the Dog—Autoregulation."

* * *

Dr. I Meschan, professor and chairman of the Department of Radiology, was a recent visiting professor at the University of Pittsburgh School of Medicine where he lectured on "Bronchopulmonary Dysplasia—Is It a Relatively Common Entity?" and "Correlated Data in Studies of the Brain between Clinical Radioisotopic, Arteriographic and Pneumographic Studies."

* * *

Dr. Norman M. Sulkin, professor and chairman of the Department of Anatomy, was a visiting professor June 10-12 in the Department of Pathology at Indiana University School of Medicine. He lectured on "Induction of Lipofuscin in Laboratory Animals" and "Special Techniques for the Induction of Lipopigments in Brain and Other Organs."

* * *

Dr. Charles M. Howell, Jr., professor of medicine, was a guest lecturer recently at the Roosevelt Hospital Institute of Allergy, New York City. He spoke on "Allergic Contact Dermatitis."

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Dr. Barnes Woodhall has returned to his practice of neurosurgery at the Duke Medical Center after serving for 16 months as the University's chancellor pro tem.

Dr. Woodhall came to Duke in 1937 to organize the neurological surgery service. Since 1960 he has held, in sequence, the posts of Dean of the School of Medicine, Vice Provost in charge of the Medical Center, Associate Provost and Special Assistant to the President.

When the chancellorship was established last year, Dr. Woodhall agreed to serve until a permanent chancellor was named. The new chancellor took over July 1.

Dr. Woodhall is the James B. Duke Professor of Neurosurgery.

* * *

An experimental program which is providing 11 students from small colleges with intensive training in the basic medical sciences is underway this summer at the Medical Center with the assistance of a \$77,250 three-year grant from the Josiah Macy, Jr., Foundation of New York City.

The purpose of the program is to provide these students with experience in the pre-clinical science courses they could expect to find in medical school.

The program, which includes nine college seniors and two students who will be freshmen at Duke Medical School this fall, is made up of lectures on

anatomy, physiology, and biochemistry, participation in campus seminars, and individual laboratory research with supervision of a member of the medical faculty.

It was organized primarily to provide students from minority groups with an educational opportunity not previously available to them.

* * *

Memorial funds continue to be received for the Walter L. Thomas Education Fund in the Department of Obstetrics and Gynecology.

Dr. Thomas, 64, a professor of obstetrics and gynecology and a Duke faculty member for more than 30 years, died April 18. Mrs. Thomas and her daughter, Mrs. Tommy Wilson, established the fund on the same day and Dr. Roy T. Parker, department chairman, set up a collection point for memorial contributions.

Dr. Parker said that several uses of the funds are under consideration.

* * *

Dr. Samuel L. Katz, chairman of the Department of Pediatrics, was visiting professor at the Mt. Zion Hospital Department of Pediatrics in San Francisco May 18-21.

* * *

Dr. David C. Sabiston, Jr., professor and chairman of the Department of Surgery and co-author of the textbook "Surgery of the Chest," has been informed that a Spanish edition of the work will be published in the near future.

Dr. Sabiston was recently re-elected to a three-year term as governor representing the Southern Surgical Association to the American College of Surgeons.

* * *

Dr. Edmond Gonzales of the division of urology, won the Montague L. Boyd essay contest on the American Urological Association Southeastern section cruise April 10-19 for a paper on "Experimental Estimation of Transviceral Digoxin Absorption."

* * *

Dr. Donald Silver, associate professor of surgery attended the International Symposium on Cardiovascular Research in Paris April 20-22 and presented the papers "Hypofibrinolysis: Its Role in Intravascular Thrombosis," and "Lymphangioplasty: A Safe, Simple Adjunct for Treating Lymphedema."

He also went to London to visit the Great Ormond Street Hospital for Sick Children.

* * *

Three members of the Duke medical faculty and two house officers have been honored for their teaching skills by students in the School of Medicine.

Selection of the "Golden Apple" award winners

for the 1969-70 academic year was announced at the annual medical school show May 19.

Dr. Stanley H. Appel, chief of the division of neurology, and Dr. David C. Sabiston, Jr., chairman of the Department of Surgery, shared the clinical sciences award.

Named the best teacher in the basic sciences was Dr. Bernard Fetter of the Department of Pathology.

The House officer award went jointly to Dr. H. Preston Boggess, chief resident in pediatrics, and Dr. Samuel A. Wells, Jr., chief resident in surgery.

* * *

Four Duke medical faculty members presented a medical symposium titled "An Afternoon with Respiratory Diseases" in three North Carolina cities May 27-29.

The symposium was given in Elizabeth City on the 27th, Greenville on the 28th and Sanford on the 29th.

Participating were Dr. Herbert Sieker, professor of medicine, who spoke on "Allergic Respiratory Illness," Dr. Thomas R. Cate, assistant professor of medicine, whose talk was titled "Acute Respiratory Infections"; Dr. J. A. Dowell, also assistant professor of medicine, talking on "Environmental Factors in Lung Disease", and Dr. Sam McMahon, assistant professor of medicine, who spoke on "Acute Respiratory Failure—Evaluation and Management."

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH SCIENCES

More than 60 school administrators, teachers and counselors came together at the UNC School of Pharmacy in July to attend the first of three one-week sessions on drug abuse.

The program, supported by grants from the Federal Drug Education Training Program and the Z. Smith Reynolds Foundation, provides for training of school personnel in all areas of North Carolina so they will better be able to recognize and cope with the serious problem of drug abuse in the public schools.

The three institutes are being held in cooperation with the North Carolina Department of Public Instruction.

* * *

Dr. Cecil G. Sheps, director of the Health Services Research Center and professor of preventive medicine, has been chosen for membership on the Committee on Problems of Drug Dependence of the National Research Council, National Academy of Sciences.

The committee provides a forum for the discussion of the new findings of investigators doing research in drugs. It also has an advisory relationship to various agencies that have responsibilities in the area of drug dependency.

A \$8,680 grant for laboratory investigation of the value of antibiotics in preventing infection in surgical operations on the skeletal system has been awarded to Dr. Frank C. Wilson, chairman, Division of Orthopaedic Surgery, N. C. Memorial Hospital.

The award was made by the Clinical Research Grants Committee of Lilly Research Laboratories.

The infection-preventing use of the new cephalosporin antibiotic drugs in bone surgery will be evaluated.

Co-workers on the project are Dr. William Bowers, a resident in orthopaedic surgery and Mr. Walter Greene, a rising third year medical student at the University.

* * *

Dr. Robert A. Briggaman, assistant professor of dermatology, gave a paper entitled "Formation of Structures at the Epidermal-Dermal Junction in Adult Skin" at the Second Conference on Epidermal Differentiation in Michigan last month.

* * *

UNC anthropologist John Gulick has been awarded a \$36,100 grant for directing research in Iran that will lead to establishment of a family planning and research center in the city of Isfahan.

The project, funded by the National Science Foundation, is a collaborative effort of UNC's Carolina Population Center and the University of Isfahan. Its ultimate purpose is to increase effectiveness of the Iranian government's family planning program.

* * *

Milton P. Siegel, assistant director general of the World Health Organization, Geneva, conducted a special seminar in International Health Administration at the University of North Carolina School of Public Health, between August 5 and 18.

During August he also served as a consultant to the School's Department of Health Administration and to the Carolina Population Center.

* * *

Dr. Carl B. Lyle, Jr., associate professor in the School of Medicine, begins a two-year leave of absence in August to work with a group practice in Charlotte, to develop new and improve older methods of delivery of primary medical care.

* * *

Dr. Charles E. Morris, associate professor, will be officer in charge of the National Institute of Neurological Diseases and Stroke Research Unit in Agaña, Guam, for one year beginning Sept. 1.

* * *

Dr. Kenneth M. Brinkhous, professor and chairman of the Department of Pathology, has been chosen a member of the new Task Force on Arteriosclerosis of the National Institutes of Health which will plan a ten-year research assault against arteriosclerosis.

The following new faculty appointments at the University of North Carolina School of Medicine have been announced:

Dr. Paul Munson has been appointed Sarah Graham Kenan Professor and Chairman of the Department of Pharmacology. He earned his master's degree from the University of Wisconsin and his Ph.D. from the University of Chicago.

Dr. Ralph H. Boatman has been appointed to the new position of dean of Allied Health Sciences. He has been with the University here since 1960, serving as chairman of the Health Education Department, director of continuing education and field service, and professor in the School of Public Health.

Dr. Joseph A. Buckwalter, professor of surgery, has served as professor of surgery at the University of Iowa since 1952. He received his M. D. from the University of Pennsylvania.

Dr. Howard A. Schneider, professor of biochemistry, is currently a lecturer at the University of Wisconsin. He earned his M.S. and Ph.D. degrees from the University of Wisconsin.

Dr. Merrell D. Flair, associate professor of psychology in the Department of Psychiatry and director of the Office of Medical Studies, served as assistant dean and assistant professor at Northwestern Medical School. He holds post-graduate degrees from Kansas Teachers College and Northwestern University.

Dr. Richard V. Wolfenden, associate professor, has served as assistant professor at Princeton since 1964. He holds degrees from Princeton and Oxford universities and the Rockefeller Institute.

Dr. Charles Noel Carney, assistant professor in pathology, was chief of Laboratory Service for the Naval Hospital in Memphis, Tenn. He received his M. D. from Medical College of Alabama.

Dr. Andrew Myron Johnson, assistant professor of pediatrics, was an instructor at Harvard Medical School last year. He earned his M. D. at Vanderbilt University.

Dr. Harold Carter Smith, assistant professor in surgery and biochemistry, was a research chemist with R. J. Reynolds Company. He earned his Ph. D. from the University of North Carolina.

Dr. Catherine Anne Taylor, assistant professor of psychiatry, has served as an associate in psychiatry and pediatrics at the Duke University Medical Center. She is an M. D. graduate of the University of Tennessee.

Glenn Wilson, associate dean for Community Health Services and research associate in Health Services Research Center, served as executive vice president of the Kaiser Community Health Foundation in Cleveland, Ohio.

Dr. Jeffrey J. Andresen, instructor, has served as clinical instructor at the Medical University of South Carolina in Charleston since 1968. He holds an M. D. degree from the University of Pennsylvania.

Raymond L. Paine, Jr., instructor in the Department of Psychiatry, has served as psychiatrist and clinical director of the Onslow County Mental Health Clinic since 1968. He earned his M. D. from the University of Michigan.

Dr. Edwin T. Preston has been appointed Director of Rehabilitation at the Medical School here.

An assistant professor in the Division of Orthopaedic Surgery, **Dr. Preston** joined the University faculty in January 1969.

* * *

Some 12 funeral home, ambulance and rescue squad members received certificates for completion of an Emergency Care Training Course sponsored by North Carolina Memorial Hospital.

The purpose of the course was to increase the skills of persons actively engaged in providing care for and transporting the sick and injured with emphasis placed on good initial care of patients.

* * *

Low income couples will have the opportunity to seek family planning aid from private physicians in a pioneering program soon to be launched in 22 rural areas of North Carolina.

The program, announced in Washington, D. C. June 26, will be carried out by the Carolina Population Center of the University here under a \$500,000 Office of Economic Opportunity grant. The Center, established in 1966, conducts research, training and service activities extending from North Carolina and other Southern states to multiple relationships in Thailand, India, the Middle East and Latin America.

RADIOLOGY AND NUCLEAR MEDICINE SYMPOSIUM

The Department of Radiology, Memorial Hospital, Danville, Va., will present its second annual Radiology and Nuclear Medicine Symposium in cooperation with the Department of Radiology, Duke University Medical Center Nov. 4-6. Sessions will be held in the Nurses Auditorium of Memorial Hospital, Danville.

In addition to faculty members from Duke, the University of Virginia School of Medicine, the Bowman Gray School of Medicine, and the University of North Carolina School of Medicine, a number of distinguished physicians from other states and Canada will participate in the symposium.

Address inquiries to Robert McLelland, M. D., Director, Department of Radiology, Memorial Hospital, Danville, Va. 24541.

AMERICAN COLLEGE OF CHEST PHYSICIANS

The Southern Chapter of the American College of Chest Physicians will hold its annual Scientific Session on November 16, 1970 at the Civic Auditorium, Dallas, Texas.

An interdisciplinary faculty will provide basic information on the principles of circulation and respiration and the application of this information to patient care.

NATIONAL INSTITUTE OF MENTAL HEALTH

Appointment of Dr. John E. Adams as associate director of the Division of Manpower and Training Programs of the National Institute of Mental Health has been announced by Dr. Stanley F. Yolles, Director of the Institute.

As associate director of the division, Dr. Adams will head its program planning and evaluation functions. He will participate in the development of immediate and long-range plans for the \$100 million a year mental health manpower training grant activities.

A native of Chapel Hill, N. C., Dr. Adams, has moved to the Training Division from a post as Special Assistant to the Director, NIMH where he served for the past two years.

* * *

A four year clinical study, which conclusively disproves claims that LSD is effective in treating alcoholics, has won the American Psychiatric Association's Hofheimer Award for 1970. The Lester N. Hofheimer Prize for Research was presented to the principal investigators, Jerome Levine, M.D., and Arnold M. Ludwig, M.D., and research assistant Louis H. Stark, A.B., at the annual meeting of the APA in San Francisco on May 11, 1970.

SOUTHEASTERN DERMATOLOGICAL ASSOCIATION

The Southeastern Dermatological Association will meet at the Medical College of Georgia in Augusta April 3-4, 1971, Dr. J. Graham Smith, Jr., secretary-treasurer announced.

Dr. Robert Kierland will be the guest clinician and Dr. Richard Reed will be the dermatopathologist. All sessions will be moderated by Dr. Wiley M. Sams.

For further information, contact Dr. J. Graham Smith, Jr., Medical College of Georgia, Augusta, Georgia 30902.

AMERICAN HEART ASSOCIATION

The American Heart Association will hold its 43rd Scientific Session in Atlantic City from Nov. 12 to 15. The AHA Assembly and Annual Meeting will be held on Nov. 16-17.

The Council on Arteriosclerosis will hold its annual scientific meeting on Nov. 11 in Howard Johnson's Motor Lodge in Atlantic City.

Five all-day Postgraduate Seminars have been scheduled in conjunction with the AHA's annual Scientific Sessions. The seminars sponsored by the Heart Association's scientific Councils will be held on Nov. 11 at Atlantic City's Shelburne Hotel.

Attendance fees are \$10 for members of AHA Councils and residents and research fellows they sponsor, and \$25 for others. Advance registration is required.

Forms to register may be obtained from the Department of Councils, AHA, 44 E. 23rd St., New York, N. Y. 10010.

Book Review

Current Diagnosis and Treatment. By Henry Brainerd, M.D., Marcus A. Krupp, M.D., Milton J. Chatton, M.D., Sheldon Margen, M.D., and associate authors. 844 pages. Price, \$100.00. Los Altos, California: Lange Medical Publications, 1970.

Medical texts, like prostitutes, must at times be all things to all men, provoking behavior likely to dilute reputations and to substitute show for performance. Accelerated specialization in an affluent society seems to demand similar perfidy of expression, if each reader is to find his own level of abstraction (or ignorance), a problem simplified not at all by our necessary willingness to change curricula for medical students, along with our definitions of medical care. Thus the dinosaurs of medicine, the many-volumed encyclopedias sold door to door in past decades, are now judged fossils, and their more sensible one- or two- volume competitors have maintained status depending on the hybrid vigor of the responsible editorial kindred. But these elephants are for the library rather than the bedside, and for the student who knows what he wants to confirm; they aren't really helpful in creating a sense for sickness or in providing quickly the salient features of disease and information about appropriate therapy. Too often they seem to create an atmosphere of medieval languor, as if endotoxic shock could be contemplated for an eon or two.

To fill the pressing need for the active practitioner, a number of mutations have appeared, some shrunken elephants without zeal and others functional in a true operational sense. The currents, Therapy and Diagnosis, have been spawned to meet the need—and do, in part, the former much, much better than the latter, which has too much to say about too little.

In contrast, the limp-backed editions of the Lange Medical Publications have been well edited, the fat swabbed away, and most of the necessary data included under the appropriate heading. For the practitioner, the ninth annual edition of Current Diagnosis and Treatment is a safe, sane, sober volume which reads easily, almost as if from one pen; a tribute to Drs. Brainerd, Krupp, Chatton, and Margen, who have done their homework well, and a proper memorial to Dr. Brainerd, who died before this edition appeared.

There are flaws, of course, and omissions (the Giordano-Giovannetti diet in the treatment of uremia and acetazolamide for the treatment of the patient with periodic paralysis), but these are to be expected in any book. Only the section on poisons is inadequate, so poor that the book would have been better off without it. It is unselective, often irrelevant, frequently incorrect, and always tedious. Despite such a section, the book is still a best buy.

* * *

The North Carolina Heart Association carries on a program of year-round public education in all 100 counties of North Carolina.



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At least that's what 1919 statistics said.

An American male born that year had an average life expectancy of 50 years.

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Life expectancy for a normal male baby born in the United States averages almost 74. Longer life expectancy is reflected in the fact that we have more people doing more than ever before to provide good health.

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North Carolina Blue Cross and Blue Shield, Inc.

In Memoriam

JOHN F. HUNT, M.D.

Dr. John F. Hunt, aged 95, of Spindale died April 30, 1970, in an Asheville hospital after an illness of nine months. He had been a practicing physician for more than 69 years and worked until the latter part of July, 1969, when he became ill.

Dr. Hunt was a native of Surry County and attended Yadkin College. He was a graduate of the University of Tennessee Medical School.

He began the practice of medicine in 1900 at Cesar, in Cleveland County. In 1902 he moved to Haw River in Alamance County, where he practiced for less than a year before returning to Cesar. He remained in Cesar until 1923, when he moved to Spindale. He continued his medical practice there until illness forced his retirement in July, 1969.

In 1900 Dr. Hunt was married to Miss Ada Whitaker of Surry County, who died in 1904. The couple had two children, who survive: Mrs. J. H. Burwell of Spindale and Dr. John J. Hunt of Cincinnati. In 1906 Dr. Hunt was married to Miss Virginia Lattimore of Cleveland County, who died in 1962. Dr. Hunt is also survived by five grandchildren and seven great-grandchildren.

Dr. Hunt did postgraduate work at New York University in 1911. He was a member of the Rutherford County Medical Society, the Medical Society of the State of North Carolina, and the American Medical Association. He continued to participate in seminars and extension courses throughout his medical career. He was a member of the medical staff of the Rutherford Hospital.

MELVIN PHILLIP HOOT, M.D.

Whereas, God in His infinite wisdom chose to take our fellow physician, Dr. Melvin Phillip Hoot, away from us on June 5, 1970, we, the members of the Pitt

County Medical and Dental Society, wish to express our heartfelt sympathy to Mrs. Hoot and the three children: Mrs. Dan Wright, Jr., Mrs. William G. Roe, and Mr. Melvin Lee Hoot.

Those of us who knew him will cherish the memory of his devotion to his profession. Many people have good vision today because of his skillful services.

His contributions extended beyond the community in that he was the instigator of the eye bank and its regional chairman. He began the local speech and hearing clinic.

He was always genuinely interested in the comfort and welfare of his patients.

He inspired confidence because he was cheerful and optimistic.

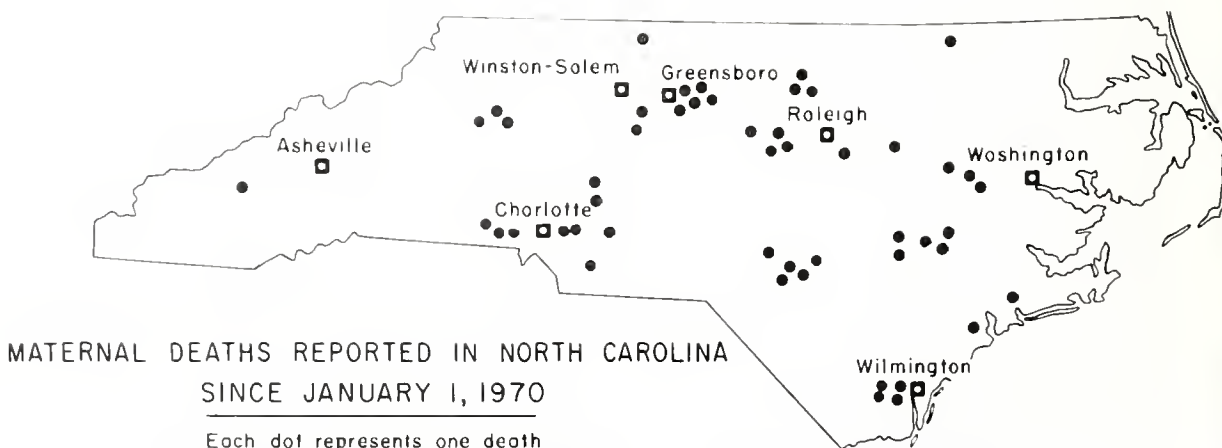
Now, therefore, be it resolved that a copy of this memorial be spread upon the permanent minutes of this Society, in the Archives of the North Carolina Medical Journal, and the Daily Reflector.

Pitt County Medical Society

Classified Advertisements

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IN THIS ISSUE:

Perinatal Mortality - Past, Present and Future

T. D. SCURLETIS, M.D. AND OTHERS



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Perinatal Mortality - Past, Present, and Future

THEODORE D. SCURLETIS, M.D., JOHN T. KING, M.D.

KATHRYN SURLES, M.ED., AND JAMES R. ABERNATHY, PH.D.

In recent years numerous reports have demonstrated changing trends in infant mortality in North Carolina^{1,2} and in the United States.^{3,4} Since the early 1950s the previous rapid decline has been less pronounced both in the United States and in North Carolina.

Because of the lack of improvement in infant mortality, many have sought to identify the causes of infant mortality and to suggest corrective measures. To date, however, little has been accomplished in terms of practical utilization of the information gathered. The present effort speaks to this need.

Background

Improvements in postneonatal mortality in North Carolina have recently been demonstrated;⁵ therefore, we address ourselves presently to perinatal mortality and its components. Trends in perinatal, fetal, and neonatal mortality are shown graphically in Figures 1-3 for both the United States and North Carolina.

Since 1962 the North Carolina white and nonwhite perinatal death rates have each decreased more than 55%. Similar trends have been observed for the nation as a whole. Nearly all of the decline occurred during the second quarter of the century; however, since then, only slight improvement has occurred.

When the North Carolina data are examined for 15-year periods as indicated by

the grid lines (see figures), the leveling off in the previous rapid decline is evident. Whereas the North Carolina white perinatal rate (Fig. 1) dropped 18% during the period 1926 to 1940 and 45% from 1940 to 1954, the decrease since 1954 has been only 5%. For nonwhites the decreases in rates were 21%, 36%, and 12% respectively for the three 15-year periods. Decreases in rates for the United States have followed similar patterns, with the white rate leveling off to a greater extent than the nonwhite rate.

Fetal ratios (Fig. 2) have decreased more for nonwhites than for whites since the beginning of the period (1926), but the difference occurred during the 1926 to 1940 interval when ratios dropped 19% and 28% for white and nonwhite respectively. During the subsequent intervals white and nonwhite decreases in fetal ratios were almost identical, an approximately 41% decline from 1940 to 1954, and approximately 14% decrease for the period 1954 to 1968.

Neonatal death rates (Fig. 3) dropped 17% and 13% for white and nonwhite respectively during the 1926 to 1940 interval, 48% and 33% from 1940 to 1954. While the nonwhite rate has decreased approximately 12% since 1954, the white neonatal rate for North Carolina increased 3.2% during the last 15 years, owing to a higher rate in 1968 than in 1967. The United States has experienced a steadier decline in rate over the past 15 years than has the state.

In view of these recent trends in North Carolina's perinatal mortality, greater stress must now be given to the identification of women representing high risks for pregnancy wastage, with renewed effort in health

Read before the Section on Obstetrics and Gynecology and the Section on Pediatrics, Medical Society of the State of North Carolina, Pinehurst, May 19, 1970.

From the North Carolina State Board of Health, P. O. Box 2091, Raleigh, N. C. 27602.

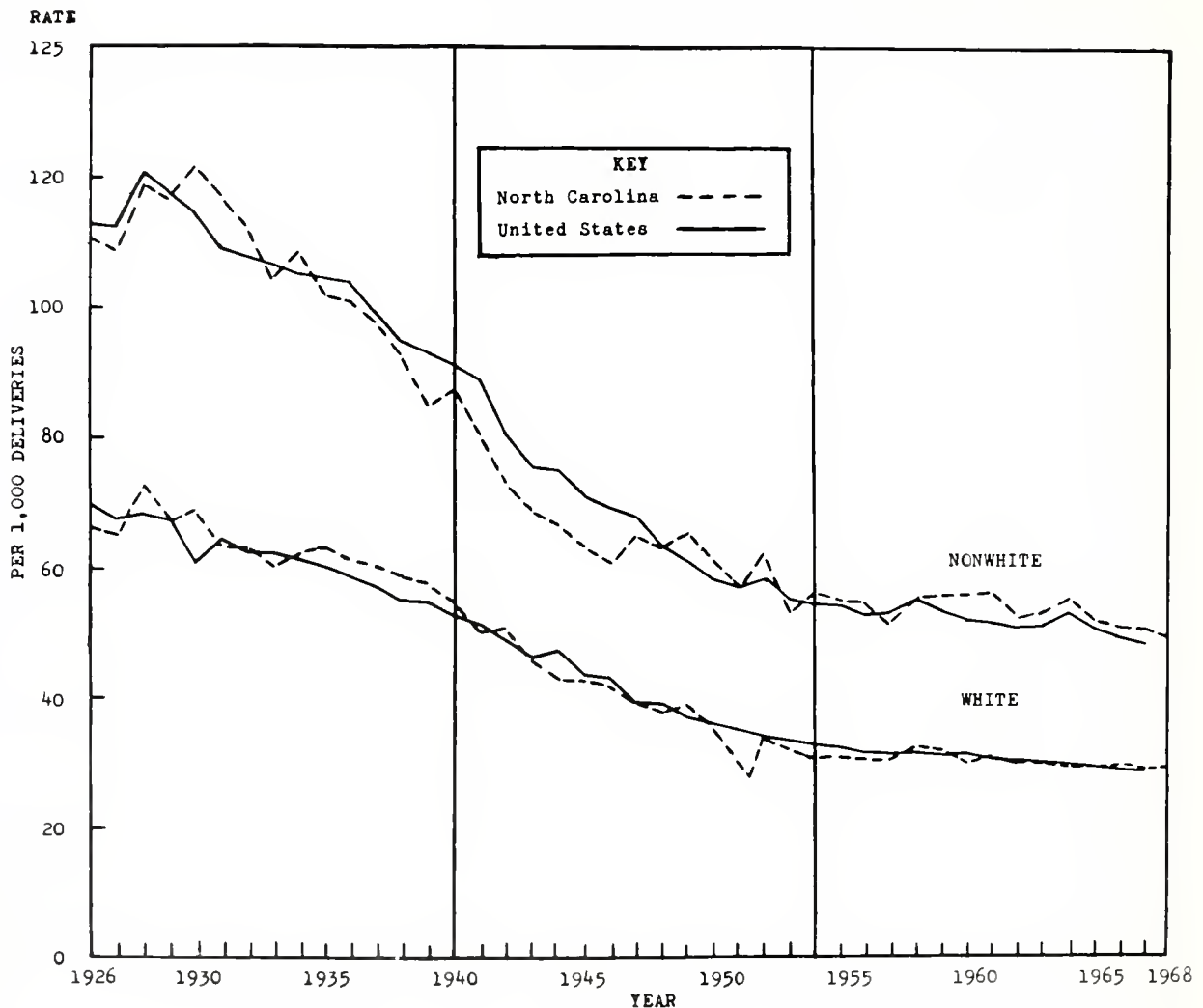


Fig. 1. Perinatal death rates by race: North Carolina and the United States, 1926-1968.

program planning. Only through improved health services and education, aimed particularly toward the mortality prone group of women, can we hope to affect perinatal loss substantially.

Prematurity has been documented as being the most important cause of infant death, mortality varying much more widely by birth weight than by any other single variable.⁶ Factors related to prematurity have been defined sufficiently well to enable us to describe the groups who are disposed to premature childbirth and mortality. In particular the variables of interest are maternal age, gravidity, marital status, prior history of pregnancy, certain medical and obstetric conditions, and socioeconomic status. When these factors are adjusted for race, it has been demonstrated that race

per se is not a significant factor.⁷

Review of the Literature

Reporting data collected in the North Carolina Fetal and Mortality Study,⁸ Donnelly and others have demonstrated a high correlation between certain maternal and environmental factors and the outcome of pregnancy.^{7,9-11} Shapiro and Abramowicz have more recently identified certain correlates of pregnancy outcome,¹² reporting a study designed to investigate the relationship between a broad variety of maternal conditions and pregnancy wastage and damage.⁸ Their conclusions have been supported by others.

Both Donnelly and Shapiro demonstrated the elevated risk of perinatal mortality among very young mothers, a lower risk

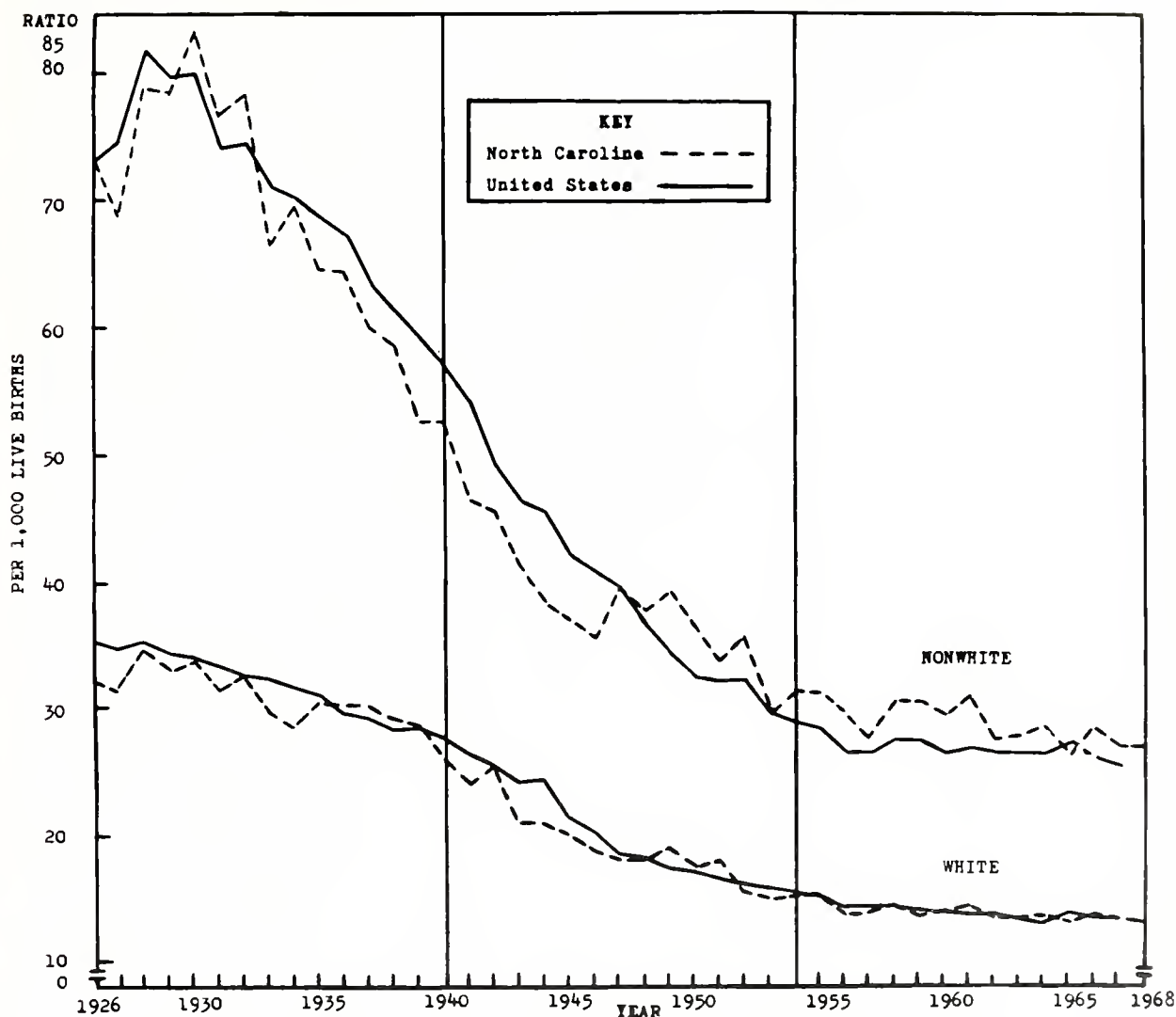


Fig. 2. Fetal death ratios by race: North Carolina and the United States, 1926-1968.

among mothers ranging from 20 to 29 years of age, and a rapidly increasing risk thereafter. Maternal age is shown to be a highly significant factor even when adjusted for socioeconomic status and parity.⁷

Although the perinatal mortality differential between legitimate and illegitimate infants has narrowed during the past decade, especially among whites,¹⁵ the difference remains excessive and out of wedlock pregnancy continues to be an indicator in defining the high risk pregnancy.

Birth spacing, on the other hand, has not been shown to be a significant factor in perinatal mortality, although it is a foregone conclusion that this factor should affect perinatal loss. Shapiro concluded that by comparison to other determinants, pregnancy outcome was only moderately related to

birth interval. Donnelly also noted that birth interval, or interval between marriage and birth in primiparas, did not appear to be significant when adjusted for race, age, and parity.⁷

A high correlation between prior pregnancy history and outcome of the current pregnancy has been demonstrated by both Shapiro and Donnelly. Shapiro concluded that the risk of a fetal death among pregnancies preceded by a fetal death is two to three times the rate among pregnancies with only previous full-term live births. Similarly, the risk of a premature birth among pregnancies preceded by one or more premature births is three to four times the corresponding rate among pregnancies preceded only by full-term live births. A history of gynecological disorders with staining and bleed-

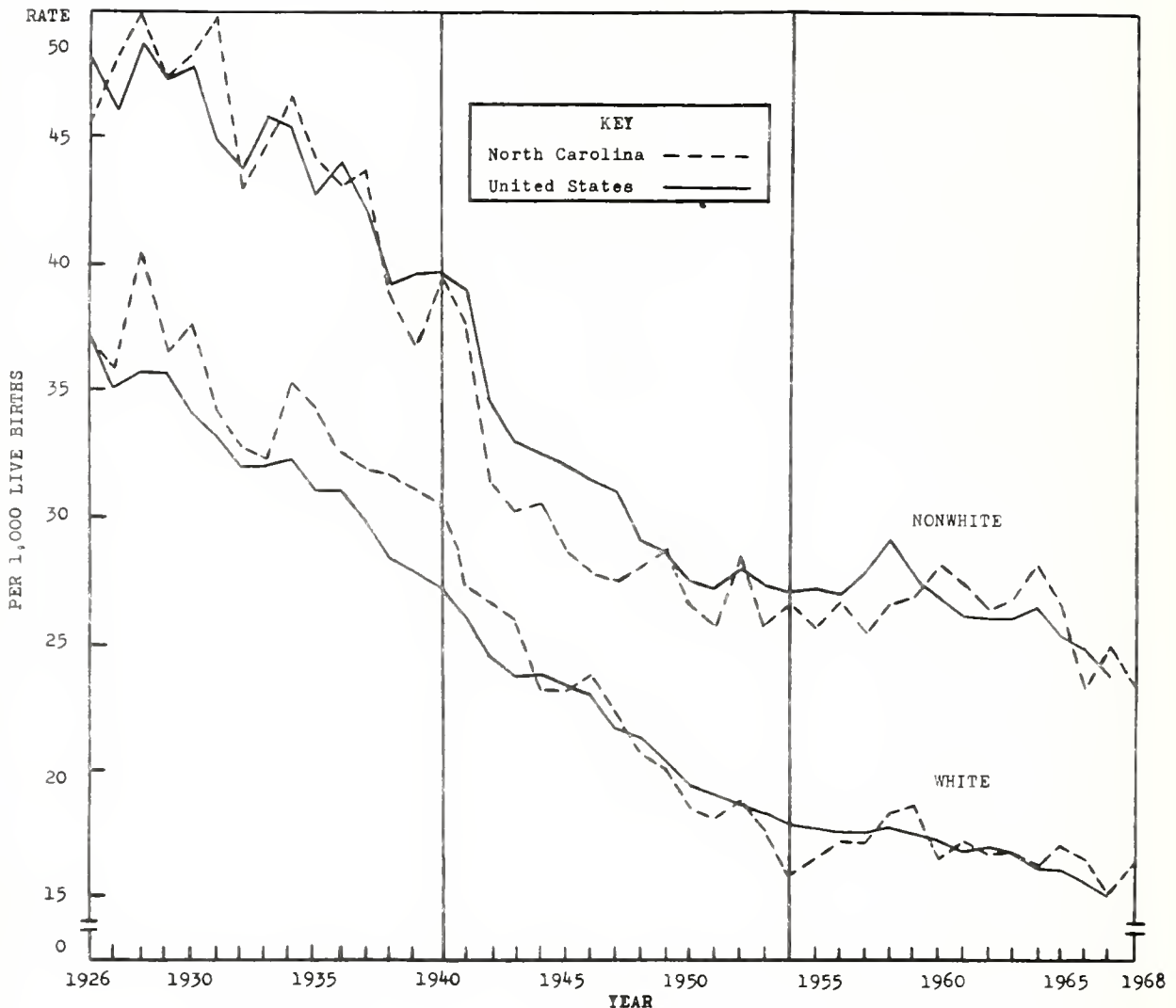


Fig. 3. Neonatal death rates by race: North Carolina and the United States, 1926-1968.

ing in an earlier pregnancy was also shown to be associated with an increased risk of pregnancy wastage and damage. No increased risk was noted for women who reported a history of toxemia or eclampsia.

Toxemia, premature separation of the placenta, placenta previa, and unclassified bleeding occurring in the current pregnancy have been shown to have a highly significant relationship to perinatal mortality. Studying conditions occurring during the first 11 weeks following the last menstrual period, Shapiro found noninfectious gynecologic conditions, urinary tract infections, rubella, and a rising Rh titer as well as antepartum bleeding to be associated with an elevated incidence of pregnancy wastage and damage.

Relating selected obstetric and non-obstetric complications to prematurity, Don-

nelly demonstrated a higher proportion of complications among mothers of premature infants, with complications during pregnancy progressively rising in frequency from the most favored to the least favored socioeconomic groups. The data indicate that the incidence of prematurity is two to three times higher in the presence of one or more of the selected complications than in the absence of any complication.

Donnelly also demonstrated a high correlation between maternal height and prematurity, shorter women having higher rates. Although height per se has no clinical significance, it is mentioned here as another parameter in defining women who are more likely to deliver a small infant.

Numerous investigations have indicated a progressively higher incidence of pre-

turity and perinatal mortality from the most favored to the least favored socioeconomic class. Studies of Donnelly's data in relation to father's occupation, mother's education, and those two parameters together, revealed that the incidence of perinatal mortality or prematurity was significantly higher in the least favored occupation group, educational level, or socioeconomic class. Covariant analysis for maternal age, gravidity, race, and other socioeconomic factors indicated that the father's occupation and the mother's education are each highly significant in relationship to perinatal mortality.⁷ Drillien concluded that the incidence of prematurity is associated with the mother's social class prior to marriage rather than to the father's social class or income.¹⁵

Baird has suggested that maternal height, social class, and nutrition are interrelated.¹⁶ As noted previously, Donnelly demonstrated a higher proportion of complications during pregnancy occurring in the lower social classes. Undoubtedly, all of these factors are often interrelated.

Discussion

Obviously further improvement in perinatal mortality will depend upon paying particular attention to those groups of women who contribute most significantly to the high rates. Undoubtedly this means placing high priority on the pregnant woman who is identified as representing a high risk in rather broad categories as follows:

1. She is less than 20, preferably under 17, or over 30 years of age.
2. She is pregnant for at least the fourth time.
3. She is unmarried.
4. She has previously delivered a premature infant, a stillborn infant, or a live infant who died neonatally.
5. She had some gynecological disorder in a previous pregnancy.
6. She had some medical or obstetrical complication in a previous pregnancy.
7. She has some medical or obstetrical complication in the current pregnancy.
8. She has less than a high school education.
9. She is small in stature.

Of course, these classifications are rather crude; however, they have proved effective, and they enable us to quickly identify those who are at risk so that we may give our most careful attention to these patients.

What must be done in order to reach our goal of improvement in perinatal mortality?

1. Attention must be given to the high risk pregnancy on a priority basis.
2. More effective techniques must be utilized in identifying the high risk patient.
3. Medicine must take leadership in educating the community to the total values of comprehensive care, which should include family planning, prenatal counseling, pre-pregnancy counseling, etc.
4. Newer techniques in the delivery of care must be devised.
5. Total involvement of the community to assist in the total problem of care must be accomplished.

Let us first speak to the role of the physician in a community as it relates to this problem. Medical leadership must be developed and the change must be advocated by those who are primarily responsible for the delivery of medical care. As a result, our physicians must be involved in guiding our schools in the development of family life education programs which can prepare our children for future parenthood. Physicians must take leadership in guiding their communities in the development of the necessary services. They must take leadership in demonstrating the importance of the use of the subprofessionals. They must re-orient themselves towards the more efficient application of their skills as well as the professional skills of nursing, social service, and other disciplines in the delivery of medical care. They must be involved in the development and coordination of training programs for the subprofessional and the redefining of professional responsibilities at various levels. Finally, they must take leadership in developing programs to educate the community to the importance of medical care and to the great cost benefit of using total preventive approaches rather than dealing

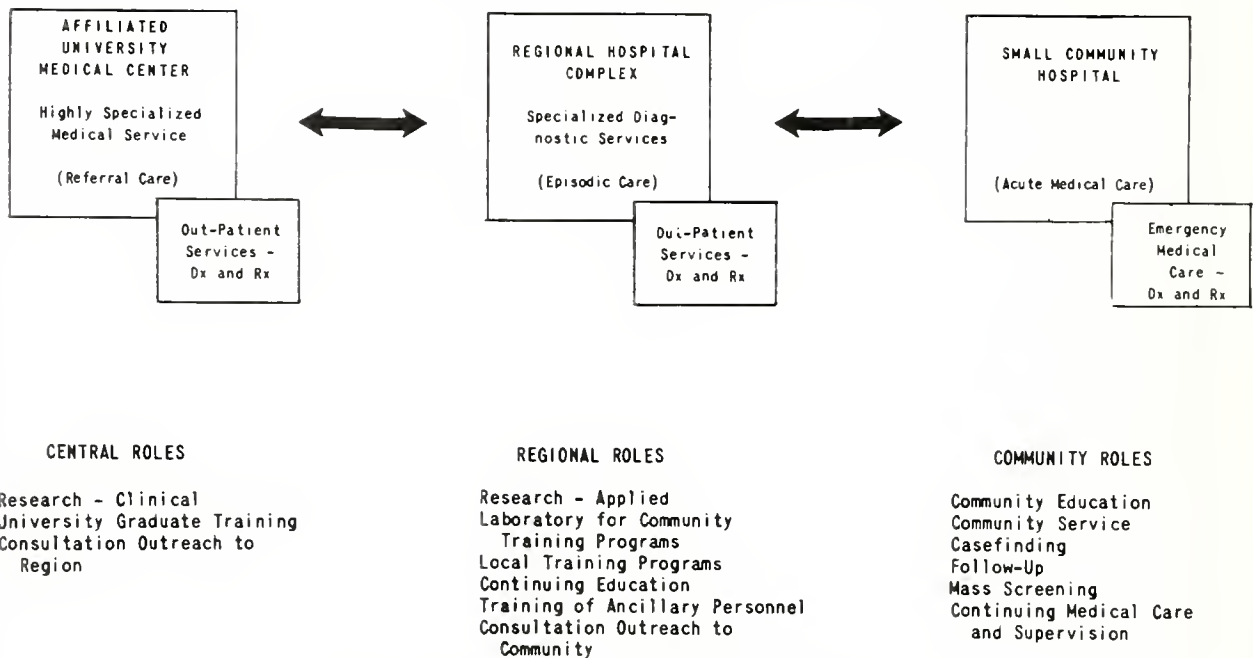


Fig. 4. Complex of medical care facilities and services.

with the results of a lack of prevention.

We need to lead our communities in the development of regional complexes of medical care services (See Figures 4 and 5). At the community level extreme emphasis must be placed on the development of case finding and preventive services through the establishment of better relationships of health and social service personnel and the training of outreach individuals. We must search our communities to identify pregnant women as early as possible and to refer them to the preventive service. We must expend great effort to make premarital, pre-pregnancy, and family planning counseling readily available. These areas must be developed in such a manner that they will have an effect on the total community and be acceptable to all residents of the community.

On the community level we should deliver prenatal care and postnatal care as well as inter-pregnancy care, including family planning, contraception, sterilization, and cancer detection. This care would be given primarily by nursing personnel under the immediate direction of the consulting physicians, who are responsible for the total community program. Emphasis should be placed on evaluation of the patient and early identification of any abnormalities of the pregnancy. The concept of multiphasic screening

can be introduced in such a program to identify asymptomatic disease. Medical care for acute conditions and continuing medical care of the woman and her family should be carried on within the community confines.

All delivery services should be consolidated on a regional basis, so that no hospital would be providing delivery services unless it was serving a population that would generate a minimum of 2,000 deliveries per year. This would then allow the regional hospital to develop a totality of services needed by pregnant patients, such as a medically directed anesthesia service, complete laboratory services, ready availability of blood, necessary consultation with specialists in other areas of medicine, and adequate delivery room and nursing facilities. This would allow for the concentration of our limited manpower in a manner that would be most efficient and effective. It would also allow for the development of intensive newborn care facilities that are so dependent on an adequate patient census.

In the regional hospital, it would be the obstetrician's responsibility to coordinate the medical care of the patient in the hospital with the preventive services rendered in the community. He would be assisted by a highly skilled nurse-midwife who would be responsible for the obstetrical nursing services

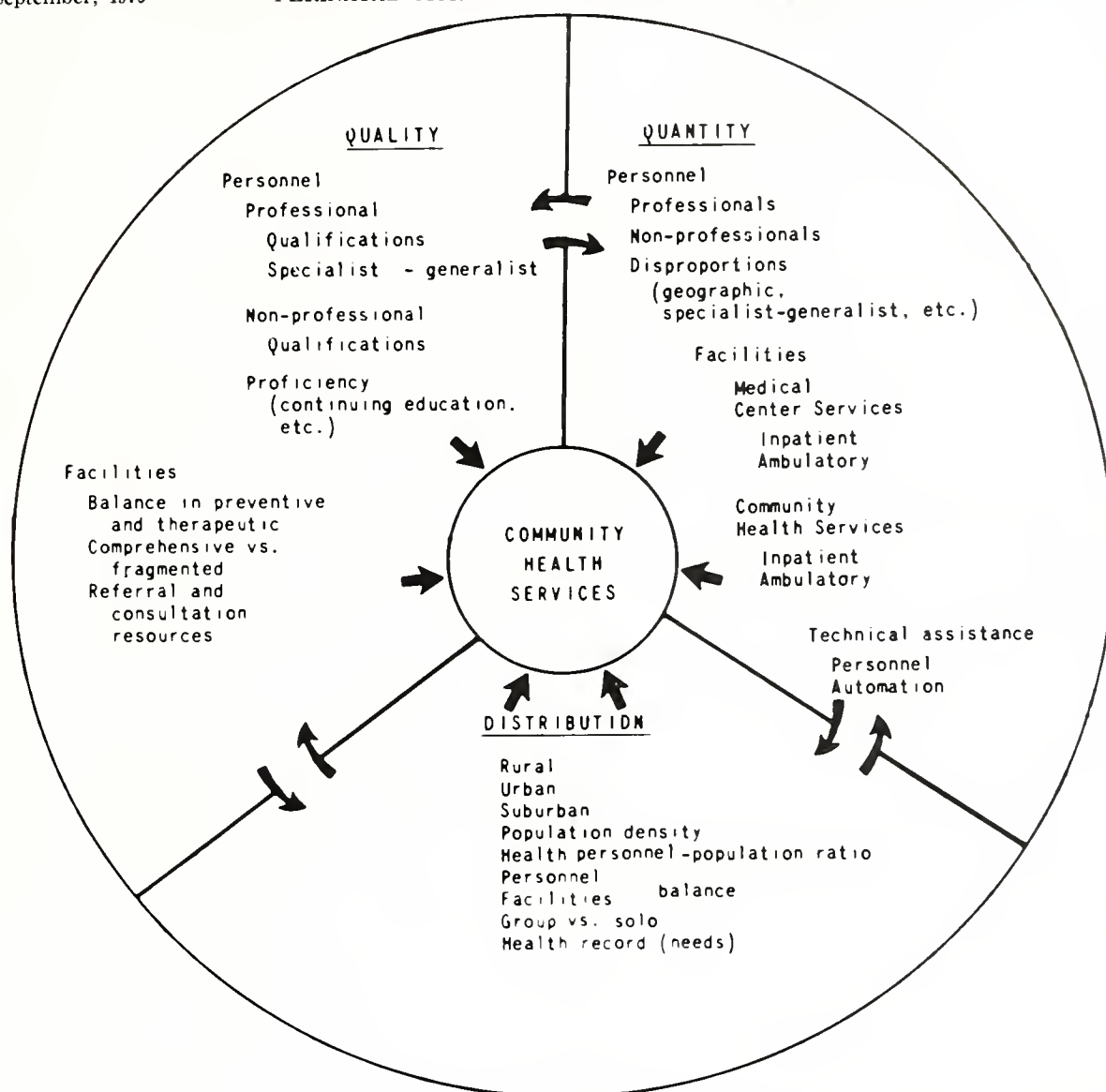


Fig. 5. Dynamics of health manpower resources (from Richmond, J. B.: Essential Elements for Comprehensive Health Care for Children and Youth. Conference on the Role of Maternal and Child Health and Crippled Children's Programs in Evolving Systems of Health Care, Ann Arbor, Mich., March 23-25, 1970.)

both within the hospital and at the community level. This nurse should be responsible for training skilled subprofessionals to supervise patients in labor and assist in delivery care. She would be responsible for developing a program of education for the young mother and for the maintenance of a program of continuing education for the nursing staff of the regional hospital as well as the community nursing staff rendering the preventive care.

The regional hospital would be directly affiliated with one of the primary university training centers and would also serve as a laboratory for the medical and nursing grad-

uate training program. These programs would also assist in the development of continuing education as well as local training programs. Of course, affiliation with the university medical center would provide ready access to consultation and the transfer, when necessary, of patients who cannot be dealt with on a regional basis. This should enhance the opportunity for applied and fundamental research in which the university medical center is involved.

In order for this concept to be totally effective, one would have to reorient his thinking about the performance of all individuals concerned. Ancillary services would

be needed to make this effective—such as a half-way house for obstetrical patients, closely attached to the regional hospital. This would make it possible, when necessary, for the obstetrical patient who needs bed rest or special care prior to delivery to be cared for at the regional level. To look after the patient's home and family and to realistically arrange for regional care, homemaker services must be available at the community level.

This concept of care could be applied to both the private as well as the medically indigent patient. Of course, great emphasis would be placed on the high risk patients, the majority of whom fall into the medically indigent category. With such a concept, one gives attention to the patient who is in the greatest need of intensive medical care and reduces the attention given to the patient in lesser need.

Of course, this discussion has ignored the fact that one of the greatest barriers to the delivery of obstetrical care to the indigent patient is the lack of financial support. The medically indigent patient is generally not covered by the typical social service programs and usually has no insurance coverage. In order for a total program to be effective, a more realistic concept for financial support of medical care for these groups must be sought.

Summary

A review of perinatal statistics indicates that the marked improvement of the early periods has reached a plateau in recent years. Many causes that are directly related to the increase in mortality in this period of life have been identified, but there has been little implementation of this information. This paper is devoted to the possibility of developing a new system of delivery of obstetrical care in an attempt to overcome some of the critical predisposing causes of increased mortality.

In summary, one can therefore say that in order to improve perinatal mortality, one must bring about:

1. Greater emphasis on and attention to high risk groups.
2. A better program of education for the population.
3. The development of new systems of delivery of care.
4. Physician initiative in leading his community.
5. Further study of the socially related ancillary needs of maternity patients and the development of programs to meet these needs.

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What Are We Doing Right?

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Once upon a time there was a heavy-weight boxer. He was a good boxer and had won a lot of important fights. But on this particular night, matched against another contender for the championship, he was having a rough time.

At the end of the eighth round, bruised and beginning to bleed, he walked back to his corner and sat down heavily. As his trainer gave him a drink of water, a fast rub-down, and worked on the cuts on his face, his manager ran up and patted him on the back.

"Don't worry, Tiger," the manager said. "You're doing fine. He hasn't laid a glove on you."

The fighter looked around at his manager through bleary eyes and said, "Then you'd better keep an eye on the referee. Somebody in that ring is knocking the hell out of me."

We might not yet be bleeding, but we certainly have been bruised by all the knocking around we've taken.

And we're a long way from being whipped.

But I think it's time we had a little more encouragement than we've been getting. So I am going to play the role of the manager. I can't be quite as cheerfully, and unrealistically, optimistic as he was and claim that nobody has laid a glove on us. But I think I can offer some words that will help us keep our enthusiasm high for the tough rounds we still have to go through.

The Critics

It seems that just about everyone has climbed into the ring to take a swing at us. We've been hit with charges of graft and greed, indifference and incompetence.

And who's been doing the hitting? It's hard to find somebody who hasn't.

Our opponents include government officials

and labor leaders . . . college professor and congressmen . . . newspaper and magazine writers and authors of books . . . radio commentators and producers of television specials . . . and witnesses from many walks of life before Senate and House committees.

Perhaps the most painful of all are members of our own profession who look around at their colleagues and apparently see nothing but failure. Instead of discussing their findings at medical society meetings, where something constructive might be devised, they prefer to talk to the press or appear before TV cameras to tell the public what they call the shortcomings of their profession.

Frankly I'm pretty sick and tired of hearing all those people berate the medical profession for things over which it has no control, while ignoring all of the good things the profession does every day to meet its responsibilities.

I'm still waiting for a government leader, union president, college professor or editor to make a nationally covered speech—or for a network news department to present an hour-long documentary—showing how many million successful operations were performed last year.

Or how many million men returned to their jobs after being cured of some disease.

How many million men, women, and children were relieved of pain and restored to health after a bout with the flu.

How many people didn't catch diphtheria, whooping cough, tetanus, smallpox, or typhus because of medical advances.

How many broken bones were set and healed perfectly.

How many cancers were detected and cured.

Or how many babies were born strong and healthy.

These achievements get no attention.

Instead, people who are looking for headlines or television time concentrate on some-

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thing else entirely. They pick out the most unfortunate people in the country. People who have no education because the cities and states didn't make sure all children had an equal opportunity to get one.

People who have no jobs because they haven't been trained, because union apprenticeship programs won't accept them, and because industry has automated itself beyond the need for unskilled workers.

People who live in unspeakable conditions, in slums owned by absentee landlords who have no legal obligation to provide heat, running water, sanitation or pest control.

And then, ignoring all other factors, they blame the medical profession and the system of medical and health care for the fact that those unhappy, unfortunate, unlettered people are not healthy.

The crowning blow of all is that when they find physicians who devote all or a part of their practice to caring for the poor, they point the finger of scorn and accuse them of profiteering because they accept government payment for the care they give.

For generations, physicians gave free care to the poor. Then, against the will of the medical profession and at the urging of the same people who are doing the criticizing now, the federal government passed Medicare and Medicaid. Now, physicians are accused of graft and corruption for accepting the payments they never sought from those programs.

We are more closely involved in giving everybody good medical care than anyone else in the nation. But you'd think we were the principal obstacles.

The critics, however never point out that the gigantic problems of the poor are not brought about by the medical care system. Ignorance, unemployment and poverty are not medical problems. They are social and economic.

Their solution does not depend on the medical profession alone. It depends on concerted action by the nation's educational system, by its employers and unions, and by city, state and federal government, plus all the citizens who are involved or who can become involved.

Meanwhile, what can we do? What can today's medical and health care system do, under the leadership of our profession?

First, we can continue doing all the things we are doing now—things that, in spite of what our critics say, give a level of medical care to the vast majority of this nation's people, and encourage a rate of scientific advancement, that are the unattainable envy of most nations in the world.

Second, we can increase our activities to help solve the problems that exist.

What We Are Doing

Let me remind you of what just a few of those activities are. Let me show you some things we're doing right, that you won't hear much about anywhere else.

Government liaison

One intangible, but very important thing the AMA has accomplished is to develop closer ties with the federal government. Certainly this is desirable and necessary, since the government is more and more involved in health and medical matters.

Leaders in government are coming to realize that the AMA has resources and knowledge unavailable to anyone else in the world. And what we don't know right now, we can find out quickly through our staff or any of our many specialized councils and committees.

Surprisingly enough, Medicare is much of the reason for our increasing stature. We predicted some of its problems and pitfalls, and our predictions have turned out to be correct. As a result of that, and of our increased efforts all along the line of governmental liaison, I believe that more important people are listening more carefully to what the AMA has to say. And more of them are acting on what we say.

That doesn't mean that nobody in Congress is going to make a move without consulting the AMA for direction. It doesn't mean that more laws won't be passed with which we disagree.

But it does mean better overall relations with the government, which are likely to make solving all the other problems a little bit easier.

Abortion

For instance, there is abortion.

The AMA has modified its long-standing and conservative position on that controversial subject. But as physicians, concerned with the health of every patient, we have moved with great caution.

After long study, a committee of AMA leaders proposed a series of changes in state laws which became a landmark policy two years ago. The guidelines we set then are now the common position taken by most medical and non-medical leaders alike. They liberalize our earlier position, but carry safeguards to prevent abuse.

Drug abuse

The word "abuse" naturally brings to mind another serious concern of physicians—drug abuse. Our Committee on Alcoholism and Drug Dependence, along with the National Academy of Sciences and the National Research Council, is providing most of the scientific and policy guidance for today's efforts in that area.

For a long time, the AMA has warned against LSD, amphetamine, opium derivatives, and other addictive drugs, including alcohol. Our statements on marihuana undoubtedly are influencing the government to reduce harsh penalties against users—many of whom are youthful experimenters on a one-time basis—and to emphasize action against the pushers.

We are continuing our national campaign on alcoholism, advocating that its victims need help, not jail sentences. The law does not really serve the nation if it locks up the victims of alcoholism. The idea is to restore them to their families and return them to productive work.

Mental illness

The AMA also is right up front in the nation's battle against mental illness. It was our Council on Mental Health that led a national campaign some years ago to set up a network of mental health community centers for ambulatory care of patients.

Pollution

Then there is the single problem that gets

more attention today than any other: pollution—pollution of our land, our waterways, lakes, and air.

Serious articles are being published in technical journals, asking not whether man can survive on this planet, but for how long. Exciting and frightening articles and books also are being written for the public, trying to generate understanding and action.

Again, the AMA is running ahead of the pack in trying to meet the problems. Through its councils, it holds national and regional meetings and has published many articles alerting the nation and Congress to the dangers.

People who think pollution is a relatively new problem, as far as recognition of it is concerned, would do well to check the *Journal* of the AMA for February, 1895. It carries an editorial that warns against the increasing pollution of navigable streams in this country.

Through the decades since that time the AMA has pushed for federal laws to police industry and to demand the elimination of practices that lead to pollution of air, water, or land. Our contributions to all those areas have been, and are, entirely constructive. But it is typical that those contributions have received precious little public notice.

The Problems We Face

Now I want to say a few things about probably the three most important problems facing us today as physicians. The three are the shortage of medical and health manpower, the rising cost of care, and how care can be provided to the poor.

The manpower shortage

The shortage of physicians and allied health workers, as all of us know, is not because fewer are being produced. There are more than ever before. But the demand for care has grown so much faster than the supply that the result is a serious shortage.

To help correct it, the AMA and many other professional and allied groups are working together. We have urged medical schools to expand their enrollment, and they are responding favorably. We also advocate

better use of medical school facilities to cut down the time required for graduation, without lowering the quality of the graduates. And of course we have urged the construction of new schools.

We and our allies are looking for ways to expand the functions of allied health people. For example, we hope to see the professional nurse upgraded and brought into the practice of medicine. There are many other plans being studied for developing new kinds of allies to take on new duties, releasing physicians to do the things only a physician can do.

Medical care costs

To help bring down the cost of health care—the second of our three biggest problems—the AMA again is cooperating with other organizations having a similar interest.

We have urged physicians, as purchasing agents for the total care of their patients, to eliminate or reduce hospitalization where possible, and to take advantage of extended care facilities or home health services where the patient's condition makes it possible.

We are trying to get the health insurance carriers and prepayment plans to provide more coverage for diagnostic tests as well as therapeutic care given outside of the hospital—in the physicians office, in nursing homes or other institutions, or in the patient's home.

We are also trying to educate the public about ways in which they can reduce unrealistic demands that help increase the cost of their own care.

In the area of financing care, we are supporting a form of national health insurance—the AMA income tax credit plan—to help pay for health insurance premiums.

The plan is called *Medicredit*. It is based on a sliding scale, according to how much federal income tax a family owes at the end of the year.

We believe that tax liability is a more accurate measure than total income, since it reflects the number of dependents and other individual circumstances of a family's finances. People who can afford to provide

their own protection are expected to. We believe that's fair. Our viewpoint on that subject hasn't changed since we were opposing Medicare. We believe strongly in government help for those who need it, but not for those who don't.

Families of low income—as measured by the income tax liability—would be given federal certificates with which to buy insurance coverage through programs offered by private carriers that meet standards set by an advisory committee. As the amount of income goes up—which means as the amount of income tax goes up—the amount of government help goes down.

Health care for the poor

Finally, the third of our big problems: health care for the poor.

We are much concerned with this responsibility, or problem, or whatever we might call it. And our concern includes people in both urban and rural areas. Through our Committee on Health Care of the Poor and other councils and committees, the AMA is right now preparing specific recommendations for helping these people get all the medical and health care they need.

Meanwhile, physicians are continuing to take care of them. That fact is usually overlooked, or ignored, by critics of medicine and supporters of plans to reorganize and control the medical profession.

But the very critics who hound us by claiming that doctors are profiteering on Medicare and Medicaid actually are giving us a backhanded commendation. Because if it weren't for the thousands of physicians giving care to the beneficiaries of those programs, there would be nobody to criticize.

None of them seem to have noticed that fact, however. They prefer to tell two different and diametrically opposite stories. One is that too many physicians are making too much money by taking care of the poor. The other is that the medical profession doesn't do anything to take care of the poor. I wish they'd at least make up their minds.

Conclusion

I believe that I have given you enough

documentation of medicine's efforts to provide the kind of encouragement I promised at the beginning of these remarks.

To return once more to the allegory about the boxer, it is true we have been knocked around by a lot of critics and opponents. But

we've known the fight is not nearly over yet. We've got some more important rounds to go, and there is still plenty of fight left in us.

It won't be easy, and it won't be quick.

But with your help, we'll win.

Airway Management In An Intensive Care Unit

KERMIT R. TANTUM, M.D.*

The use of prolonged mechanical ventilation has increased in recent years, and as a result many lives have undoubtedly been saved. This is a difficult type of care to carry out safely and effectively. Not infrequently, complications arising from the techniques themselves result in significant morbidity and mortality. One source of complications is the artificial airway, either the endotracheal or the tracheostomy tube. While traditionally the tracheostomy tube has been used for prolonged positive pressure ventilation, recent years have seen increasing use of the endotracheal tube as either a replacement of or an adjunct to the tracheostomy. Endotracheal tubes have also been used to replace tracheostomy: (1) to allow a patent airway with spontaneous breathing, (2) to allow tracheobronchial toilet, and (3) to prevent aspiration into the lungs.

There has been considerable controversy over the place of each type of airway in the intensive care unit. Most authorities would agree that each is a valuable technique and that the two are complimentary. Certainly all would agree that each may be associated with major complications. Endotracheal tubes and tracheostomies will be compared in terms of these major complications as they occur: (1) during placement of the airway; (2) while tubes are in place; (3) during the immediate post-extubation

period; (4) during the late post-extubation period.

There are a great many variables which can contribute to both the incidence and severity of these problems. The control of these variables will be emphasized.

Complications During Placement of the Airway

Placement of an endotracheal tube is usually uncomplicated when done by an experienced person. It can be carried out as an emergency procedure anywhere in the hospital with a minimum of equipment. Problems are usually limited to mucous membrane and tooth damage unless the intubation is technically difficult. Traumatic intubations have been associated with later complications, emphasizing the need for a skilled intubator.

The type and magnitude of complications occurring during placement of a tracheostomy tube, however, are much greater. Not uncommonly cardiac arrest has occurred during the surgical procedure, probably as a result of inadequate control of the airway and hypoxia. Massive bleeding, pneumothorax, or damage to adjacent structures in the neck may occur during this procedure. The control of these problems depends on the skill of the operator and the conditions under which he is operating. Experienced surgeons do not consider this a minor procedure. For these reasons an endotracheal tube is preferable to tracheostomy in an emergency situation, and is usually done first. If tracheostomy is then decided upon, it can be carried out electively in a controlled manner.

Read before the Section on Anesthesia, Medical Society of the State of North Carolina, Plnehurst, May 18, 1970.

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Complications Occurring While the Tubes are in Place

Either type of tube may become obstructed, with catastrophic results. The most common cause of obstruction is plugging with secretions which have become dried and inspissated. This is more likely to occur with a long narrow tube such as the nasotracheal tube. The problem is entirely preventable. First and foremost in the prevention is the achievement of adequate humidification, which should be done with equipment that delivers gas saturated at body temperature. Second is adequate suctioning. This is more easily done with a tracheostomy than with an endotracheal tube. Catheters which are lubricated—or better still, Teflon-coated—facilitate the procedure.

A second cause of obstruction is herniation of the cuff over the end of the tube. This is most likely to occur with the narrow, unevenly inflating cuffs frequently used on tracheostomy tubes. Nurses must know how to recognize the problem and treat it properly by deflating the cuff.

Displacement of either type of tube out of the trachea can occur. This possibility is best avoided by using a tube of the proper length and fixing it securely. Decannulation can be especially hazardous with a tracheostomy during the first 48 hours, before a fistula tract has formed from the skin to the trachea. Endotracheal tubes can easily be displaced downward and into the right main stem bronchus, particularly in infants. This is a problem that must always be looked for after intubation, both clinically and by x-ray.

Mouth hygiene can become a problem with an oral tracheal tube. For this reason some doctors prefer a nasotracheal tube, though with its use ulceration and necrosis within the nose is not uncommon.

Many physicians consider the removal of secretions through an endotracheal tube less adequate than through a tracheostomy. While the technique of the former is more difficult, if it is carried out meticulously secretions should be cleared equally well as through a tracheostomy.

Local infection of a tracheostomy wound is best controlled by frequent observation and changing of the tube and the dressing. This problem is especially important when there is an incision such as a midline sternotomy close to the tracheostomy. Cross-infection and mediastinitis can be lethal. Some consider this risk a reason to avoid tracheostomy all together in favor of an endotracheal tube.

Massive hemorrhage resulting from the erosion of a tracheostomy tube into the innominate vessels is best prevented by making the stoma sufficiently high in the trachea that the tube will not tend to lie in close proximity to these vessels.

Early Postextubation Complications

Acute laryngeal edema (croup) following endotracheal intubation is most likely to occur in children. The incidence in children ranges from 3%-5% and is especially common in the one to three year age group. Croup does occur in adults, though less frequently than in children, and is most commonly associated with the use of an oversized tube or with a pre-existing inflammation of the upper part of the airway. Patients must be observed for signs of croup for several hours after extubation. Most patients should receive well humidified air or oxygen as a preventive measure after prolonged intubation. The traditional treatment of croup has been the use of humidified oxygen and steroids. If these measures fail, a smaller endotracheal tube may be introduced or a tracheostomy performed. Recent data suggest that the use of 2% racemic epinephrine administered topically to the larynx with an intermittent positive pressure breathing machine is an effective way of treating acute laryngeal edema following prolonged intubation. Investigators have been able to avoid re-intubation and tracheostomy completely by using this technique.

Hoarseness is almost universal after prolonged endotracheal intubation. This symptom usually disappears during the first week, but may persist for four weeks or longer.

Aspiration of food, saliva, or gastric con-

tents into the lungs is a common and potentially serious problem after prolonged endotracheal intubation. The presence of the tube over a long period results in loss of the usual protective reflexes of the larynx for a period of time after extubation. Great care must be exercised in feeding patients until they demonstrate return of this function.

Difficulties with decannulation of a tracheostomy are commonly observed in infants. Frequently the problem is related to the laryngeal condition for which the tracheostomy was done. One may be unable to remove the cannula from an infant, however, even when the larynx is normal. This complication is presumably related to the narrow lumen of the infant, which may be further narrowed by loss of cartilage in the structures and mucosal swelling. When a lack of normal mucosociliary activity is added, the result is obstruction of the airway.

Ulceration and necrosis of the mucous membranes and deeper structures can occur with the use of either tube. This seems to be the basic lesion from which complications can later arise. With an endotracheal tube, the location of these ulcerations is fairly constant. They are usually found along the medial side of the arytenoid cartilages, between the arytenoid cartilages and at the level of the cricoid cartilage posteriorly. Additional ulcerations may be seen circumferentially at the level of the inflatable cuff. With a tracheostomy, the areas of ulceration are primarily at the level of the inflatable cuff, though not infrequently damage is noted where the tip of the tube touches the mucosa anteriorly. This tissue destruction may be superficial and heal rapidly and completely, or it may extend to submucosal and cartilagenous structures with a much more prolonged and complicated healing phase. Granulated tissue is frequently noted at these sites of ulceration and apparently represents one process of healing, but it may progress to the point of obstructing the airway.

Late Postextubation Complications

The most serious of the complications fol-

lowing prolonged endotracheal intubation is stenosis of the larynx, usually in the subglottic region. When it occurs this can be a very difficult problem to manage. Both dilatation of the larynx and surgical intervention may be unsuccessful in relieving the obstruction. On occasion a permanent tracheostomy is required. The reported incidence of this problem varies widely in different series—from 0 to 24% in children and from 1% to 8% in adults.

Fibrotic stenosis within the trachea can follow the prolonged use of any tube with which an inflatable cuff is used. Again the reported incidence is quite variable. Pearson, in a careful prospective study, found that tracheal stenosis of some degree followed the use of cuffed tracheostomy tubes in 20% of the cases. While stenosis may develop at the level of the stoma of the cuff, it is rarely seen when an uncuffed tube is used. These fibrotic lesions probably represent a process of healing of the sequence of ulceration, necrosis, perichondritis and granulation formation seen earlier. Of clinical importance is that these lesions may become far advanced before the patient feels dyspnea or a strider becomes evident. The airway may be reduced to 3 to 4 mm before symptoms occur, and the lesions may not become clinically evident until several months after extubation.

Factors Contributing to Fibrotic Lesion Formation

Prolonged pressure on the tissues is a primary factor in the production of fibrotic lesions within the airway. In the larynx pressure can be due to a discrepancy between the anatomy of the larynx and the shape of the tube. A rubber tube which tends to retain its semi-circular shape will not conform to the natural S shape of the airway without causing undue pressure on the posterior portions of the larynx. To minimize this effect, a slightly S-shaped tube or one which will assume the shape of the airway is preferable. A second cause of increased pressure on the laryngeal mucosa is the placement of a tube which is too large in diameter. This accounts for the higher incidence of laryngeal problems in women and children, where there is a tend-

ency to use too large a tube.

Tracheal lesions are also primarily due to prolonged pressure of the inflatable cuff. Because of this, attention must be given to the type of cuff used and to its management. In general, a cuff which distributes low sealing pressure over a large area is desirable. A rigid cuff which will distort the trachea is to be avoided. Some authors have advocated the use of plastic cuffs that can be stretched before they are inserted into the trachea. Others advise using only rubber cuffs with large residual volume and large sealing areas, and which inflate evenly. Narrow, unevenly inflating rubber cuffs are to be avoided. Tubes incorporating two cuffs must of necessity have a small surface area for each cuff and are probably less desirable.

Inflatable cuffs must be filled properly. Nurses can easily be taught to fill a cuff with only enough air to barely seal or allow a small leak with positive pressure breathing. Periodic deflation of cuffs has been advocated by many physicians, primarily to allow secretions which tend to pool above the cuff to drain.

Certain plastics have been shown to cause severe inflammatory reactions when they come into contact with the mucous membranes. Usually these reactions have been associated with the presence of an organic tin compound. Since plastics can vary in this respect from lot to lot, it is important that each lot be tested for tissue reactivity. The standard biological test is to implant a piece of the plastic into the paravertebral muscle of a rabbit and then examine the tissue both grossly and histologically. Tubes which pass this test should be so labeled.

Another source of severe tissue reaction which can be easily controlled is related to the use of ethylene oxide for sterilization. Ethylene oxide can remain in porous materials for several days after exposure. For this reason endotracheal tubes should be aired for one week following this type of sterilization. A special hazard exists when gamma-irradiated tubes are sterilized with ethylene oxide. Gamma irradiation causes the formation of hydrochloric acid as a

breakdown of plastic, and this, together with ethylene oxide, results in the formation of ethylene chlorhydrine, an extremely toxic substance.

Movement of tubes within the larynx and trachea is another cause of pressure and necrosis. Positioning the head properly, fastening the tubes securely, and administering a sedative and relaxant drug can minimize this factor. The use of a swivel connector between the tracheal tube and the respirator help to reduce trauma within the trachea.

The length of time that these tubes are left in place is another factor which has received considerable attention in relation to these serious complications. Since the patient's illness determines the total period of intubation, the usual decision to be made is when to change from an endotracheal tube to a tracheostomy as a means of avoiding the laryngeal problems associated with the former. There is a wide range of opinion on this matter. Various authors have specified acceptable periods for leaving an endotracheal tube in place ranging from 12 hours to one week in adults. There seems to be agreement that children have a longer period of tolerance, perhaps two to three weeks. Lindholm has suggested looking at the larynx periodically for evidence of ulceration during the time of intubation and basing the change to a tracheostomy on these observations.

Summary

The use of tracheostomy and endotracheal tubes is essential in intensive care units. Each may be associated with serious complications which may occur from the time of placement until many months after extubation. An endotracheal tube is the preferred airway in an emergency situation, but its prolonged use has been limited, primarily by the laryngeal lesions which can result. There are many factors which contribute to the development of inflammatory and stenosing lesions within the airway. The use of tubes and cuffs of the proper shape and size can minimize prolonged pressure to mucous membranes. The composition of the tubes, the methods of sterilization, the con-

tinuous movement of tubes within the airway, and the duration of intubation are other factors which must be considered.

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Bilateral Adenocarcinoma of the Fallopian Tube

Report of a Case

RAYMOND C. HOUGHTON, M.D.

A 48-year-old white woman, gravida 1, para 1, was referred to me on October 6, 1961 by her family physician. Her chief complaint was leakage of fluid from the vagina, of three months' duration. The discharge was sometimes pink-tinged, and of a sufficient amount to necessitate use of a perineal pad at all times. The referring physician suggested the possibility of a genitourinary fistula. There were no symptoms of pain or pressure.

The family history revealed that her father had died of carcinoma of the prostate and her mother of cirrhosis of the liver.

Results of laboratory studies were negative except for a slight anemia (hemoglobin, 9.5 Gm.). A Papanicolaou smear was negative. The physical examination disclosed no abnormalities except in the pelvis. On introduction of the speculum into the vagina, about a teaspoon of honey-colored fluid was pooled. The cervix appeared clean. The uterus was located anteriorly and to the left, and a

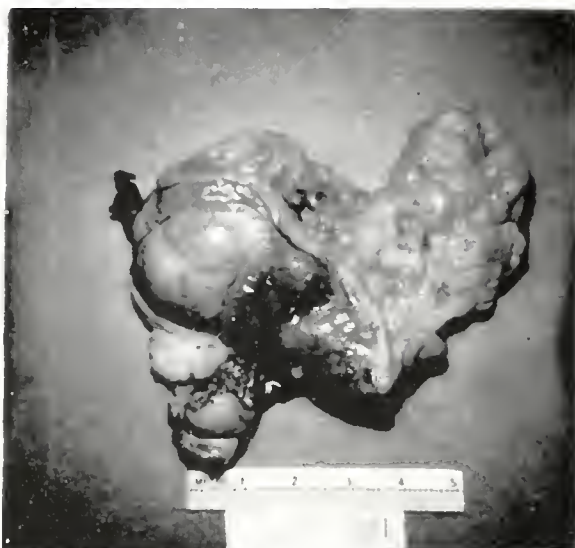
5-cm firm mass that seemed to be attached to the uterus was palpable on the right. I felt no mass on the left. These findings are certainly compatible with an old hydrosalpinx. However, because of the patient's age, the presence of an adnexal mass, and especially the profuse vaginal discharge, a tentative diagnosis of adenocarcinoma of the fallopian tube was made.

Laparotomy was performed on October 10, 1961, disclosing a 5- to 6-cm fusiform swelling of the right tube and a similar 3-cm swelling of the left tube. The gross appearance of these tubes was that of a garden variety, old bilateral hydrosalpinx. The distal ends of both tubes were grossly occluded. A total hysterectomy and bilateral salpingo-oophorectomy was performed and the right tube was opened in the operating room. The diagnosis of carcinoma was supported by the gross appearance. No other evidence of disease was found on inspection and palpation of the abdominal cavity. The pathologic diagnosis was "bilateral papillary adenocarcinoma of the fallopian tubes."

The postoperative course was uncomplicated, and the patient was referred to Duke

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Reprint requests to 323 Fleet Street, New Bern, N. C. 28560.



Gross specimen with right tube opened, showing friable tissue filling the entire tube.



Gross specimen with left tube intact showing gross similarity to old hydrosalpinx (tumor present when opened).

University Medical Center, where she received irradiation therapy (Cobalt 60, 4480 roentgens in 39 days). She was observed regularly for the ensuing six years, showing no evidence of recurrence. In October of 1967, however, she complained of abdominal swelling and pain. Examination at that time revealed that the liver was down 3 to 5 fingerbreadths, she appeared to have ascites, and hard masses were palpable in the epigastrium and the pelvis. She was referred again to Duke University, where tumor cells were found in the ascitic fluid. She received three courses of nitrogen mustard between Nov. 9, 1967, and Jan. 19, 1968. She returned home and her condition continued to deteriorate. She expired on March 26, 1968, having survived almost six and one half years.

Discussion

Adenocarcinoma of the fallopian tube is a relatively rare tumor. In 1962 only about 500 cases had been reported.² In 1967 the number was less than 700 cases⁴ and in 1968 more than 800.⁶ This figure represents about 0.1%-0.5% of all gynecologic cancers.²

The age distribution ranges from 18 to 80 years.²

The parity of these patients is quite low, probably because of the frequent coexistence of pelvic inflammatory disease. The com-

mon association of an old infection with this tumor has led to the suggestion of a causal relationship. However, Corscaden² pointed out that, in view of the prevalence of pelvic infection, this tumor should be more common than it is, if infection really is an important factor in the etiology.

The most unusual clinical finding in the condition is the discharge of fluid, hydros tubae profluens, and although it may be pathognomonic of adenocarcinoma of the tube it occurs in only a small percentage of cases.⁵

In 1962 the reported five-year survival rate was 5%,² in 1968 it was 10%-15%,¹ while in one series reported in 1969 it was 25.9%.⁷ One difficulty in arriving at the frequency of occurrence and the survival rate is the difficulty of determining whether some tumors involving both tube and ovary are primary tumors of the tube or primary tumors of the ovary.^{3,5,7} It is apparent that tumors involving both organs would be more advanced and the survival rates naturally lower.

In an effort to assist in determining the prognosis and proper therapy, at least two authors^{4,6} have suggested criteria for staging. The results of surgery alone and of surgery in combination with irradiation seem to be the same in stage 1 lesions,^{4,6} but because of the rarity of the tumor, advanced

irradiation equipment and techniques have not yet been adequately evaluated.⁶ Opinions differ as to the prognostic value of staging versus histologic pattern. Dougherty³ stated that the more undifferentiated the tumor, the poorer the prognosis, whereas Green and Scully⁵ feel that the histologic picture is less important than the stage of the lesion in determining the ultimate outcome.

The response to chemotherapy in this case was disappointing,⁴ but a favorable response to 5-fluorouracil in one case has been reported, and promising results with the use of cyclophosphamide was reported in December of 1969.⁷

Summary

The case of a woman with primary papillary adenocarcinoma of the fallopian tubes

who survived for almost 6½ years has been presented. She was treated with surgery and irradiation initially, and with nitrogen mustard when the tumor recurred. A brief review of the recent literature is included.

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The Student Preceptorship Program

A Personal Experience

ELAM S. KURTZ, M.D.

I am convinced that medical students seldom learn the kind of medicine that is needed by mankind. The goals of training are geared to upper- and middle-class pursuits of health.

Recently I had a chance to communicate with a medical student on the practice of medicine—but what a switch from the usual procedure! I learned from the student how to do it! To me, this was an unexpected, awesome, but challenging experience—a little like Johnny in college facing his father with an image not at all in the likeness of Dad.

Let me describe my experience with the student preceptorship program, and then let me tell about a possible new role in community medicine for the medical student.

A new generation of physicians is emerging—one inspired more by altruism than gain, preparing not to serve science but to relate science to man.

In the summer of 1969 I had the opportunity of engaging in a preceptorship. My student, sent by SAMA, proved an eager learner, a keen observer, and an effective activist. She was Miss Carol Weed, then a rising junior at the Woman's Medical College of Pennsylvania and a matriculate at Berkeley University.

She used her time wisely. She boarded in one of the homes of the community and became acquainted with school officials, social service workers, hospital and public health personnel, church people, physicians, and many others. She laid the ground work for a study of poverty pockets with the help of the Blue Ridge Opportunity Commission (BROC). She arranged for members of this commission to attend two regular medical staff meetings held at our hospital while she was here.

On weekends Carol met with other SAMA students in this area of Appalachia to exchange ideas and observations. Orientation and debriefing sessions were part of the

eight-week program.

Her training with me included my own solo office attempt to offer optimum paramedical experience in continuing and comprehensive medical care for a small rural town and environs in Ashe County (total population, 20,000). The area is served by four general practitioners, two general surgeons, and a part-time nose, ear and throat physician.

Here Carol first experienced assisting in surgery and obstetrics. One day she concentrated on the economics of health care and patient management, observing the office receptionist and bookkeeper team at work. She observed the method of referring patients to out-of-town medical centers and evaluated the quality of communication from the consultants in these areas. She followed the transfer of a patient to a center and the treatment received there.

Her experience in physical diagnosis had been abbreviated. In our office setting we had the dual role of making her a "compleat" physician and helping the community accept a woman doctor.

She attended public clinics in diseases of the chest, orthopedics, psychiatry, maternal health and family planning, as well as well-baby clinics and Head Start dentistry. For first-hand observation, she assisted a colleague in 24-hour emergency room duty—the much despised "dirty duty" of today's doctors, representing our failure to educate the public in the proper utilization of emergency facilities. Her solution: Hire more doctors to do the job.

She appraised the local press and radio and several distant television stations that serve the area. She commented favorably on the local media, but considered the network TV stations far below their capability in informing the public about the delivery of health care. She expressed this concern.

She visited homes in the poverty pockets to which she had been assigned by BROCC, to understand the needs and how they were currently being met, if at all. She sought information from those who were knowledgeable about the needy.

We think she translated her observations

of us without threatening those who serve; she observed without intruding, and learned without monopolizing our time.

She summarized her observations at the second medical staff conference. For example, she suggested making radio spot announcements of the Red Cross blood-mobile program, telling how citizens could become donors. This suggestion was followed. At the same meeting she, in turn, heard the new head of area public health describe the potentialities of the new cancer program, and heard the staff challenge him to consider the public health implications of rubella.

Her interest in the local Health Careers club inspired high school students to rally around her. A civic organization was prompted to give an annual scholarship, thus enhancing the value of club membership.

A first aid course sponsored jointly by the club and the Wilkes Community College was reactivated. The students also became interested in local short-term projects and even overseas missions, particularly on learning that some were sponsored financially.

The public schools accepted the challenge of reviewing each year's health teaching goals. A most important contribution is the first draft of a directory of health and social services never before available. BROCC has promised to complete and publish this directory for Ashe County and its helpers.

For me, she inspired anew the idealism that so readily fades in the humdrum of a busy practice. Carol showed a genuine liking for mountain people. The feeling is now mutual. Before she came she expressed interest in "more permanent commitments to Appalachia," and now Appalachia hopes she (or her kind) will!

Today's student of medicine welcomes the challenge of the family practice of medicine; but he must be exposed to it, for only thus can rural needs become attractive to him. I favor the extension of such programs as SAMA offers.

Addendum

I have received Carol Weed's assessment of Appalachian medicine.

Local medical opinion holds that health care *is* available to all, but she says, "This just is not true."

She considers the foremost barrier to be the *attitudes* of the people—"fatalism, resignation, doubt, fear, superstition and resistance to change." In addition, she observes "rigidness (that) keeps the isolates isolated, and the deprived deprived. Doctors manage fine without these uncooperative patients, and likewise the people get along without professional medical care." These neglected ones she holds to be a significant minority.

She ranks the *medical manpower shortage* as the second barrier, and *financial considerations* third. She did not find "physical accessibility to medical care (to be) a problem for the residents of Ashe County."

Those who do ask for financial assistance for their health needs must barter their dearly loved property. She estimated that more than half of our 20,000 people were below the poverty line. Because of barriers to health care she thought that many sick people sought help too late for good management of their cases to be possible. Established agencies entrusted with community health services and resources do not seek the needy, the needy may come to them. She observed a high accident rate in the county.

She objected that the make-shift emergency calls often failed to receive adequate office management. This failure caused both

doctor and patient to be dissatisfied with emergency care.

In conferences, student colleagues expressed a mutual concern for the underprivileged, although some felt that the poor created their own problems.

Carol's SAMA chapter in Philadelphia at the now coeducational Woman's College (it now accepts men) has among seven student projects a "patient advocate" in the hospital emergency room.

No patient advocate serves our society. In a fragmented way pressures modify us. They come from our own organizations, insurance companies, government programs like Medicare and Medicaid, labor unions, and the courts. None functions efficiently, continuously, or compassionately. We, ourselves, become too readily blinded to our patients' needs to become their ally.

Today's medical student welcomes an audition; he is both altruistic, and activist. He wants to serve and tell us about it. Could he not only serve in the emergency room at Woman's College of Pennsylvania but be given this new role of patient's advocate all across our nation?

Note

On July 1, 1970, the Woman's Medical College of Pennsylvania adopted the name, the Medical College of Pennsylvania, and its hospital became the Hospital of the Medical College of Pennsylvania.

The organization sponsoring the Appalachian SAMA program is now the Appalachian Regional Commission.

The apoplexy is a sudden loss of sense and motion, wherein the patient is to all appearance dead. The heart and lungs however still continue to move. This disease proves often fatal: yet it may sometimes be removed by proper care. It chiefly attacks sedentary persons, of a gross habit, who use a rich and plentiful diet, and indulge in strong liquors. People in the decline of life are most subject to the apoplexy.—William Buchan: *Domestic Medicine*, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.. Philadelphia, Richard Folwell, 1799, p. 288.

Prolonged Amenorrhea Following Oral Contraception

BENNETT A. HAYES, JR., M.D.

Our incomplete understanding of the mechanism of action and the total effect of oral contraceptives is becoming more apparent each day. During the past four years a number of reports of prolonged anovulation, oligomenorrhea or amenorrhea following the use of "the pill" has made us more aware of this gap in our knowledge. The purpose of this paper is to present another case of this rare condition, and review some of the previous reports.

Case Report

The patient is a 31 year old white woman, gravida 1, para 1, who had begun to menstruate at age 13, with a 30-day cycle and 6-day flow. During the first seven years of her marriage, she practiced various methods of contraception, including Orthonovum, 2 mg, which she took for one year. She became pregnant in 1965 shortly after discontinuing oral contraception and in March, 1966 was delivered at term of a 4 pound 10 ounce infant under caudal anesthesia. The estimated blood loss was less than 200 ml, and pregnancy and delivery were uncomplicated except for mild hypertension post partum. At the time of her postpartum examination in May, 1966, her blood pressure was 110/80 and her weight 112 pounds. Contraception with Orthonovum, 2 mg, was again prescribed, and she was observed at regular intervals for two years.

In April, 1968 she discontinued taking Orthonovum when her husband went to Vietnam with the Army. Following withdrawal of the hormone, five months passed without a resumption of the menses. At this time examination revealed a pale, thin, dry vagina and a small uterus sounding 2 inches. Psychogenic amenorrhea was suspected.

Withdrawal bleeding was not produced by Gestest (three tablets daily for three days), Provera (10 mg daily for 14 days and 20 mg daily for 7 days), or Clomid (50 mg daily for 5 days). A four-day period resulted from withdrawal of Premarin 5 mg a day for 12 days.

In March, 1969, after almost one year of amenorrhea, she was hospitalized. Examination revealed a normal-appearing white woman whose weight was 108 pounds, blood pressure 110/60, and pulse rate 80. General physical examination was negative. The only significant findings were related to the pelvis, where the vagina was again noted to be

thin, pale and dry; the cervix and uterus were small, and the ovaries were not enlarged.

Routine laboratory examinations were within normal limits, as were the SMA 12 and glucose tolerance tests. The 24-hour urinary 17-ketosteroids were 7.8 mg/24 hours (normal, 5-15 mg/24 hours). The 11 desoxycorticosterones were 2.0 mg/24 hours, also within normal range (1.0 to 3.0/24 hours). FSH revealed 11.4 ru/24 hours (normal 5-50).

Visual fields were normal, as were skull roentgenograms. Thyroid function was normal. No tissue could be obtained on dilation and curettage, and vaginal cytologic examination revealed 70% intermediate cells.

The patient's husband returned from Vietnam in April, 1969. She was given three consecutive cycles of Clomid, 50 mg daily for 5 days, and approximately 14 to 20 days after each cycle she experienced a light period.

There was no further investigation or treatment during the next six months, and she did not menstruate. In December, 1969, after 20 months of amenorrhea, she experienced her first spontaneous period. When examined 14 days later she was complaining of fluid retention, bloating, a 12-pound weight gain, and mild acne vulgaris. Examination revealed a thick, pink, moist vagina, and cytologic examination of a smear revealed 30% intermediate cells. She has been menstruating regularly since.

Additional Cases

In addition to this case, I have in the past five months seen five other patients whose evaluation is not complete. The first was a 26-year-old woman who was normal physically except for slight hirsutism. Since the menarche at age 12, she had followed an oligomenorrheic pattern. She took Norlestrin, 2.5 mg, for one year, "to regulate her periods," and this was followed by 35 months of amenorrhea before her previous pattern returned spontaneously.

The other four patients were in their mid-twenties, gave a normal menstrual history and had experienced brief periods of amenorrhea of three, four, six and eight months respectively following the use of combination oral contraceptives before a spontaneous resumption of normal menstruation. The patient with eight months of amenorrhea has not resumed menstruation to date. She has bilateral hydrosalpinx.

Table 1
Findings Associated with the Use of Oral Contraceptive Agents

Author	Cases	Evidence of Organic Disease	Hirsutism or Acne	Galactorrhea	Prior Abnormal Menses	No. of Preparations	Use of Agent 2 yrs. or more
Shearman	22	0	1	3	8	5	9
Rankin	2	0	0	0	0	2	0
Dodek	4	0	1	0	1	2	1
Friedman and Goldfien	21	0	—	9	5	6	11
Halbert and Christian	35	15*	—	10	9**	9	10
Present Study	1	0	0	0	0	1	1

*Five patients had diabetes; 4, pelvic inflammatory disease; 2, hypothyroidism; 7, suspected polycystic ovarian syndrome; 4, other significant medical problems.

**Twenty-five other patients had slight abnormalities.

Review of the Literature

This is an example of a relatively new entity: hypoestrogenism, anovulation, and amenorrhea following a course of oral contraceptives in a young patient manifesting no other physical or laboratory abnormalities. The incidence is unknown. More than 100 cases have been reported.^{1,7}

Most of the patients reported were under 30 years of age when the syndrome first appeared. The majority had been taking one of the combination products, suggesting that a combination of estrogen and progesterone is more prone to be associated with prolonged hypothalamic suppression than are sequential products. Typically, secondary amenorrhea persisted for 12 months or longer. All of the patients were physically normal except for 15 of the 35 reported by Halbert and Christian.⁶ Five of these were diabetic, four had inflammatory pelvic disease, two were hypothyroid, seven were suspected to have polycystic ovarian disease, and four others had significant medical problems. Tests of thyroid, adrenal, and pituitary function yielded normal results, and dilatation and curettage revealed proliferative endometrium or no tissue. Many patients revealed evidence of a decrease in endogenous estrogen. Exogenous estrogen resulted in withdrawal bleeding. Many patients had experienced menstrual abnormalities prior to taking contraceptives (23 of 85 cases). The incidence of galactorrhea was high (22 of 85 cases). The duration of use of contraceptive tablets did not correlate with the incidence. (Table 1)

Various forms of treatment were tried. Expectant management appears to result ultimately in spontaneous remission. Patients given exogenous gonadotropins responded except when premature menopause was the final diagnosis. Because gonadotropins bypass the hypothalamus and pituitary, it would seem that this would be the treatment of choice if the preparations were more available and less expensive. Some patients were given clomiphene with varying success. The response to clomiphene is higher in this group of women than in those with secondary amenorrhea. This would suggest that the pituitary is potentially normal. Glucocorticoids were used with some success. These agents theoretically produce a "gonadotropic flood" and might prove to be of more benefit as more cases are seen and treated. (Table 2).

Discussion

Oral progestins inhibit ovulation by suppressing the production or the release of gonadotropin or both. Studies have suggested that the major effect is exerted on luteinizing hormone. It is thought that the hypothalamus controls pituitary function and the exact mechanism of suppression is uncertain.⁸

The important question is whether the temporary suppression of pituitary and ovarian function can lead to irreversible changes. It has been reported that 75% of women ovulate during the first post-treatment cycles, and 87%-98% within three cycles. It is well known that the first cycle after withdrawal of oral contraceptives may be prolonged, more so following combination

Table 2
Response to Treatment
(Evidence of Ovulation or Pregnancy)

Author	Cases	Expectant Management	Glucocorticoids	Clomiphene	Gonadotropins
Sherman	22	1 of 1 (24 mos)	—	11 of 12 (6 preg.)	14 of 19 (1 menopause)
Rankin	2	1 of 2 (17 mos) (1 unresolved 22 mos)	—	—	—
Dodek	4	—	3 of 4* (2 preg.)	— 14 of 15†	1 of 1† (pregnancy)

products than sequential tablets.⁹ Estrogen excretion throughout the first cycle is reduced but rapidly returns to normal.¹⁰

Prolonged amenorrhea following the use of oral contraceptives can occur. It is more likely to occur in women with an abnormal menstrual history.

Conclusions

It is postulated that there are hundreds of unreported cases of amenorrhea lasting for three months or longer, or marked menstrual irregularity and infertility following the use of oral contraceptive agents. In these patients reassurance is all that is necessary, for spontaneous remission is prompt. Rarely this remission is greatly delayed, as in the case reported. When amenorrhea persists for 12 months or longer, thorough investigation is indicated to exclude pituitary adenoma or other endocrinopathies. While it appears that spontaneous remission will eventually occur, treatment with clomiphene, glucocorticoids or gonadotropins might be tried after appropriate studies.

The physician should be cautious in prescribing oral contraceptives for patients with menstrual abnormalities dating from the menarche, and the possibility of prolonged hypothalamic suppression should be considered when prescribing for an individual

with unproved fertility. This study would suggest that sequential products are preferable to combination products in such patients. It would also seem wise to discontinue the tablets after two years of consecutive use and allow normal menstrual function to return prior to resumption.

Further study is needed to clarify the hypothalamic-pituitary-ovarian interactions produced by oral contraceptives.

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After copious evacuations, large doses of ether have been found very efficacious in removing a fit of the asthma.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines*, etc., Philadelphia, Richard Folwell, 1799, p. 288.

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WOMEN'S LIBERATION

Judging from personal observation and the newspaper, North Carolina has women who are either already liberated or unaware that they need to be. Those unfortunately few woman physicians seen in recent days have not even been making snide remarks about the woman's "lib" movement, and the lady medical students are either afraid of getting in bad or are similarly unaware, for there was no hue and cry for bigger funnels in physiology or more urology residencies.

As physicians we have every reason to be fundamentally aware of differences between

the sexes, anatomic, physiologic and psychological, and there is hardly a physician alive and well who would not agree that men and women are different. Mr. Agnew's friend, Dr. Berman, got himself into hot water by pointing out some of these things, and the reaction to his remarks indicates how unwise it occasionally is to tell the truth.

A few years back we ran an address by Dr. Glen Leymaster, then president and dean of the Woman's Medical College of Pennsylvania ("Tomorrow's Target," February, 1965), in which he suggested some of the problems women face when going into medicine. Apparently the changes he suggested have not produced the desired effect, for the percentage of women in medical school remains under 10% (8.7% in 1969, the same as the previous year, according to the JAMA medical education issue). How much of this is due to conscious exclusion of women and how much to a lack of applicants is uncertain. It is hard to imagine that a qualified woman would not find admission, and the subject never seems to come up in medical education circles here in our state. Our State Society has a number of women in prominent places and would be glad to have more.

No doubt there are still inequitable laws on the books, directed against women, as there are against bachelors, automobiles, and other fixtures of the everyday scene. But a few more confrontations and demands by ever-proliferating groups and one wonders what will gain attention. At least the women demonstrators, where available, are worth looking at more often than the usual contemporary mob.

Ambulatory care continues to be the fastest growing service in the nation's hospitals, the American Hospital Association reports.

In 1969 the 7144 hospitals registered by AHA reported a total of 163.2 million outpatient visits and 30.7 million inpatient admissions. This represents nearly six persons using the outpatient (ambulatory) services of the hospital for every patient admitted as an inpatient.

The 5853 community hospitals, the largest category in the AHA report recorded 120.8 million ambulatory patients and 28.2 million inpatient admissions.

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
JUNE 1970 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE				
	Perinatal Deaths		Total Deliveries July 1969 - June 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries July 1969 - June 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries July 1969 - June 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Rate Per 1,000 Deliveries							
	June 1970	July 1969 - June 1970				June 1970	July 1969 - June 1970			June 1970					July 1969 - June 1970	June 1970	July 1969 - June 1970				
NORTH CAROLINA	186	1997	68535	29.1		110	1369	28655	47.8												
ALAMANCE	5	30	1306	23.0		1	21	450	46.7		PENDER	1	6	121	49.6			4	155	-	
ALEXANDER		16	347	46.1				31	-		PERQUIMANS			82	-			2	50	-	
ALLEGHANY		3	133	-				4	-		PERSON		9	278	32.4		2	13	212	61.3	
ANSON		3	153	-		1	24	286	83.9		PITT	4	24	771	31.1		6	37	663	55.8	
ASHE	2	10	322	31.1				2	-		POLK	1	3	106	-			4	46	-	
AVERY		7	207	33.8				2	-		RANDOLPH	1	33	1257	26.3			2	137	-	
BEAUFORT	2	10	387	26.8			12	272	44.1		RICHMOND	2	25	504	49.6		3	19	306	62.1	
BERTIE	1	6	109	55.0			12	255	47.1		ROBESON	1	27	576	46.9		6	58	1549	37.4	
BLADEN		3	250	-		1	11	221	49.8		ROCKINGHAM	3	29	980	29.6			20	395	80.6	
BRUNSWICK		9	279	32.3			4	155	-		ROWAN	3	35	1188	29.5		1	15	306	49.0	
BUNCOMBE	6	59	2115	27.9		3	21	283	74.2		RUTHERFORD		18	723	24.9		1	7	147	47.6	
BURKE	3	27	931	29.0			2	81	-		SAMPSON		10	414	24.2			20	316	63.3	
CABARRUS	3	27	1049	25.7		1	14	302	46.4		SCOTLAND		13	314	41.4		1	12	288	41.7	
CALDWELL	5	44	1127	39.0			6	102	58.8		STANLY	1	21	589	35.7		1	4	132	-	
CAMDEN		2	54	-			1	32	-		STOKES	1	10	345	29.0				50	-	
CARTERET	3	20	511	39.1		1	3	83	-		SURRY	2	32	922	34.7			5	60	-	
CASWELL		2	129	-			8	165	48.5		SWAIN	1	4	89	-				75	-	
CATAWBA	4	48	1552	30.9		2	7	235	29.8		TRANSLYVANIA	4	12	292	41.7		2	29	-	-	
CHATHAM	2	5	331	15.1			8	176	45.5		TYRRELL	1	1	29	-				25	-	
CHEROKEE		9	273	33.0			2	16	-		UNION	4	22	753	29.2		2	11	326	33.7	
CHOWAN		1	103	-			3	100	-		VANCE		1	317	-		2	17	349	48.7	
CLAY		9	77	-				1	-		WAKE	8	60	3106	19.3		3	57	1158	49.2	
CLEVELAND	4	26	997	26.1		4	28	463	60.5		WARREN		2	56	-		1	9	160	56.3	
COLUMBUS	2	16	510	31.4			18	307	58.6		WASHINGTON	1	2	143	-			10	140	71.4	
Craven	6	35	1201	29.1			12	375	32.0		WATAUGA	2	11	386	28.4				4	-	
CUMBERLAND	9	116	3809	30.5		3	67	1382	48.5		WAYNE	6	33	1143	28.9		3	42	601	69.9	
CURRITUCK			63	-			1	28	-		WILKES	2	33	843	39.1			1	58	-	
DARE		3	105	-				6	-		WILSON	2	24	556	43.2		2	27	595	45.4	
DAVIDSON	7	49	1463	33.5		2	17	252	67.5		YADKIN		6	359	16.7		1	4	35	-	
DAVIE		5	278	18.0			4	64	-		YANCEY		3	196	-				3	-	
DUPLIN		11	404	27.2		1	14	302	46.4		CITIES										
DURHAM	7	38	1493	25.5		5	49	981	39.9		City totals are also included in county totals										
EDGEcombe		11	404	27.2		1	21	590	35.6		ALBEMARLE		2	132	-		1	1	47	-	
FORSYTH	3	93	2772	33.5		3	49	1137	43.1		ASHEVILLE	1	16	690	23.2		3	19	238	79.8	
FRANKLIN		6	198	30.3		5	16	249	64.3		BURLINGTON	1	12	573	20.9		9	139	64.7	-	
GASTON	9	75	2592	28.9		1	29	500	58.0		CHAPEL HILL	2	5	311	16.1		3	61	-	-	
GATES		2	50	-		2	5	83	-		CHARLOTTE	4	79	3185	24.8		5	86	2056	41.8	
GRAHAM		2	115	-				14	-		CONCORD		8	226	35.4		1	6	115	58.2	
GRANVILLE		7	240	29.2		2	12	344	34.9		DURHAM	5	23	912	25.2		4	44	853	51.6	
GREENE	1	4	101	-		1	8	152	62.6		EDEN	1	3	228	-			1	57	-	
GUILFORD	8	100	3899	25.6		8	84	1606	62.3		ELIZABETH CITY		2	152	-			2	113	-	
HALIFAX	1	11	380	28.8		2	36	595	60.5		FAYETTEVILLE	2	36	938	38.4		3	37	585	63.2	
HARNETT	2	21	547	38.4			13	325	40.0		GASTONIA	2	25	839	29.8			13	226	57.5	
HAYWOOD	3	27	641	42.1				10	-		GOLDSBORO	4	16	345	46.4		2	20	254	78.7	
HENDERSON	1	19	652	29.1			2	46	-		GREENSBORO	4	50	1892	26.4		4	55	934	58.9	
HERTFORD		10	131	76.3			15	253	68.3		GREENVILLE	3	10	331	30.2		1	10	187	53.5	
HOKE		3	98	-		1	3	248	-		HENDERSON			130	-		2	9	137	65.7	
HYDE	2	4	36	-			4	47	-		HICKORY	2	17	366	46.4		1	3	108	-	
IREDELL	3	30	994	30.2		1	14	354	39.5		HIGH POINT	2	18	834	21.6		2	24	459	52.3	
JACKSON	1	9	295	30.5		1	2	54	-		JACKSONVILLE		11	444	24.6			2	69	-	
JOHNSTON	2	27	768	35.2		2	21	346	60.7		KINSTON		8	288	27.8		1	6	220	27.3	
JONES		3	69	-			3	72	-		LENOIR	1	7	223	31.4			3	53	-	
LEE	1	8	407	19.7			5	164	30.5		LEXINGTON	2	12	255	47.1		1	7	87	-	
LENOIR	1	19	597	31.8		1	16	428	37.4		LUMBERTON	1	6	192	31.3		3	13	222	58.6	
LINCOLN		13	529	24.6		1	8	98	-		MONROE		5	128	39.1			6	91	-	
MCDOWELL	3	19	529	35.9			4	43	-		NEW BERN	2	6	162	37.0			4	119	-	
MACON		5	223	22.4			1	5	-		RALEIGH	3	31	1663	18.8		2	34	589	57.7	
MADISON	2	13	238	54.6				1	-		REIDSVILLE		4	179	-			4	99	-	
MARTIN		5	206	24.0		1	12	246	45.8		ROANOKE RAPIDS	7	170	41.2				4	42	-	
MECKLENBURG	8	126	4909	25.7		7	102	2380	42.9		ROCKY MOUNT E	3	110	28.0		1	10	157	54.5		
MITCHELL	1	6	211	28.4				1	-		ROCKY MOUNT N	7	247	-			4	100	-		
MONTGOMERY	1	9	258	34.9		2	10	109	21.7		SALISBURY	1	8	205	39.0		5	140	35.7		
MOORE	2	23	465	49.5		2	14	248	56.5		SANFORD		4	178	-		2	73	-		
NASH		13	588	22.1		2	27	540	50.0		SHELBY	2	5	190	26.3		1	6	137	43.8	
NEW HANOVER	3	33	1270	26.0		2	19	366	51.9		STATESVILLE	1	7	248	29.2		1	9	147	61.2	
NORTHAMPTON		1	100	-			8	291	27.5		THOMASVILLE		5	200	25.0		1	6	99	-	
ONslow	2	53	2271	23.3		1	20	447	44.7		WILMINGTON	2	16	649	24.7		2	15	322	46.6	
ORANGE	3	17	628	20.6		1	9	227	39.6		WILSON	1	12	299	40.1		1	10	279	35.8	
PAMLICO		4	96	-			1	58	-		WINSTON SALEM	1	52	1403	37.1		3	46	1082	42.5	
PASQUOTANK	1	8	298	26.5			5	194	35.8												

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more)} + \text{neonatal deaths (under 28 days of life)}}{\text{total live births} + \text{stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

Correspondence

Gordon Scholarship Program

To the Editor:

It is my pleasure to announce the second winner of the Gordon Medical Scholarship Program (see *American Medical News*, Dec. 1, 1969, p. 3 and April 20, 1970 p. 6; *Modern Medicine*, Dec. 15, 1969, p. 64 and June 1, 1970 p. 175; *Rocky Mountain Medical Journal*, Dec. 1969, p. 4; *Medical Annals of the District of Columbia*, Jan. 1970, p. 68 and May 1970 p. 284; *North Carolina Medical Journal*, Dec. 1969 p. 502).

Robert Petrusky of Linwood, New Jersey has been chosen the recipient of the 1970 Dr. Benjamin Lee and Dorothy Gordon Memorial Scholarship. Mr. Petrusky, a Phi Beta Kappa graduate of Rutgers, has received \$5,000 to attend the Medical School of the University of California at Los Angeles. This has been awarded by the Scholarship Committee of the Atlantic County Medical Society.

The Dr. Benjamin Lee and Dorothy Gordon Memorial Scholarship has been donated by the undersigned and has been used as a model to encourage physicians to donate similar \$5,000 scholarships through their County Medical Society to enable worthy local premedical students to attend medical school.

The first winner of the Gordon Medical Scholarship Program was Nicholas P. Lang. His scholarship was donated by Dr. Anderson Nettleship and Dr. Mae Barnwell Nettleship. Mr. Lang is now attending the Medical School of the University of Arkansas.

I am most interested in hearing from anyone who would like to contribute a \$5,000 medical scholarship to one of their local premedical students through their local medical society.

Maurice B. Gordon, M.D.

6917 Atlantic Ave.
Ventnor, N. J. 08406

Bulletin Board

ANNOUNCEMENT TO SOCIETY MEMBERS

Society members who want a copy of the printed Transactions of the 116th Annual Session of the Medical Society of the State of North Carolina held in Pinehurst, May 16-20, 1970, should notify the Headquarters Office, 203 Capital Club Building, Raleigh, N. C. 27602..

A return post card for use in requesting a copy was enclosed with the President's Newsletter, which was mailed to the membership on August 5. Either the card or a note to the State Society Office will reserve a copy.

The Transactions will be printed and ready for distribution by early fall. A copy will automatically be sent to each county society delegate, president and secretary, and to State Society officers. This method of distribution was designed to make prudent use of your dues dollar.

Louis Shaffner, M.D., President

Coming Meetings

Conference on Community Health Problems and Innovative Health Care Programs in North Carolina—Carrington Hall (School of Nursing), University of North Carolina Division of Health Sciences, Chapel Hill, October 8-9.

Medical College of Virginia, Department of Continuing Education, Forty-second Annual McGuire Lecture Series, on "Burns"—Richmond, November 5-6.

Tennessee Valley Medical Assembly—Read House, Chattanooga, October 19-20.

North Carolina Chapter, American Academy of Pediatrics, and the North Carolina Pediatric Society, Annual Meeting—The Carolina, Pinehurst, November 13-14.

Second Annual Radiology and Nuclear Symposium, Department of Radiology, Memorial Hospital, Danville, Virginia—Nurses Auditorium, Memorial Hospital, Danville, November 4-6.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH SCIENCES

Projects funded at the University of North Carolina School of Medicine for 1970-71 by the N. C. Regional Medical Program are Cancer Information Service for physicians with Dr. James A. Bryan, associate professor of medicine and preventive medicine, serving as director of the UNC service; Education and Research in Community Medical Care which will develop a model community medical practice in a rural area and help communities in area health planning—Dr. W. Reece Berryhill, Sarah Graham Kenan professor of medicine, will be director; Central Cancer Registry with Dr. James F. Newsome, associate professor of surgery, as director; Continuation Education (of physicians) in Internal Medicine with Dr. Louis G. Welt, Alumni Distinguished professor and chairman of the Department of Medicine, serving as director; and Hypertension Project for North Carolina which will develop a regional program of diagnosis and therapeutics for patients and an educational program for physicians with Dr. James W. Woods, professor of medicine, serving as director.

* * *

Dr. Benson R. Wilcox, chief of cardiovascular and thoracic surgery, presented a scientific film on open heart surgery August 4 at the 11th International Congress of Diseases of the Chest being held in Lausanne, Switzerland.

Dr. Wilcox, showed the film "The Diagnosis and Treatment of Left Atrial Myxoma." The film produced at North Carolina Memorial Hospital illustrates diagnostic evaluation and successful removal of an intra-cardiac tumor from a 36-year-old man by open heart surgery.

Collaborating with Dr. Wilcox on the presentation were Dr. Ernest Craige, Department of Cardiology; Dr. Orlando Gabriele, Department of Radiology; and Dr. Louie C. Wilson, Division of Cardiovascular and Thoracic Surgery.

* * *

The Neurobiology Program at the University of North Carolina has been awarded a \$449,320 Training Grant from the National Institutes of Mental Health for a five-year period starting in July, it was announced by Professor Edward Glassman, director of the program.

Dr. Glassman, a professor of biochemistry and genetics, pointed out this constitutes more than a 20 percent increase from the previous level of funding.

The Neurobiology Program at Chapel Hill is an interdisciplinary program comprising 27 faculty members in 11 departments throughout the University.

"Our purpose is to facilitate interdepartment communication in the neurosciences and to increase the opportunities for graduate students who wish to enter this field. In general, we do this by supporting research and training in participating departments," Dr. Glassman said.

The goal is to train scientists with specialized knowledge in several fields so they will have perspective concerning neurobiology and will be able to contribute to better understanding of the basic problems of nervous system function, behavior, and mental health.

* * *

Professor Branko Kurpelj of the Department of Civil Engineering, University of Sarajevo, Yugoslavia is visiting the department of environmental sciences and engineering for three months, under the sponsorship of the National Academy of Sciences.

Prof. Kurpelj, an associate professor of sanitary engineering, will spend four months in the U. S. with the major portion of his time at UNC.

He will conduct research in the area of water management, protection of natural streams against pollution, wastewater treatment and educational programs in the field of sanitary engineering.

* * *

Dr. Roy V. Talmage has been appointed professor of surgery in the Division of Orthopaedic Surgery at the UNC School of Medicine.

Dr. Talmage comes to Chapel Hill after spending a year in Washington with the Atomic Energy Commission and will head the newly established Orthopaedic Research Laboratories.

* * *

Robert L. Reddick of Kinston, N. C. has been named a 1970-71 winner of a Martin Luther King Jr. Fellowship by the Woodrow Wilson National Fellowship Foundation of Princeton, N. J.

These fellowships are designed to enable promising black veterans to pursue graduate or professional training for careers of service to the nation and to their communities.

Reddick's fellowship will make it possible for him to work toward the M.D. degree at the UNC School of Medicine. He currently is enrolled in the UNC Graduate School and will receive the masters degree in pathology at the end of the summer under the supervision of Dr. George D. Penick.

* * *

New facts from the Office of the Chief Medical Examiner of North Carolina are identifying alcohol as a number one killer . . . both on the highway and off.

The newest information comes from Dr. Arthur McBay, chief toxicologist for the state's chief medical examiner.

The new information shows that more than 75% of the motor vehicle operators killed in single-car crashes on North Carolina highways during the 10-month period between September, 1969, and June, 1970, were either under the influence of alcohol or had been drinking.

A UNC pathologist and pharmacist, Dr. McBay is an internationally recognized authority in toxicology, particularly for his work on barbituates, alcohol, the Breathalyzer and his teaching ability.

* * *

Prof. Edward Glassman of the University of North

Carolina School of Medicine's Biochemistry Department has been awarded a \$70,000 research grant from the National Science Foundation and \$96,811 from the National Institutes of Mental Health.

These awards, for two and three years respectively, are for research in the effects of various experiences such as learning or activity on chemicals in the brain, and have important implications for questions of how the brain works and are closely related to problems involving mental health.

Dr. Glassman is also the director of the Neurobiology Program. This grant will enable the Neurobiology Program to increase the number of graduate students that are trained in this field.

* * *

The UNC School of Nursing has received a \$28,000 grant from the U. S. Public Health Service for the first year of a proposed longitudinal study of the undergraduate curriculum.

The study will investigate the interrelationship among course grades, clinical grades, scholastic measures, and nursing achievement test scores for baccalaureate nursing students at the University here. As a part of the study an instrument for evaluating clinical nursing performance, the Nursing Performance Simulation Instrument, will be developed and tested.

The study is co-directed by Elinor Dorries, director of undergraduate program, and Virginia Gover, research associate.

* * *

Dr. Abdel Omran, faculty associate of the Carolina Population Center and associate professor of epidemiology at the UNC School of Public Health, has been named consultant to the World Health Organization to direct a two-year project of epidemiologic studies in human reproduction in four Asian countries—India, Iran, Lebanon and Turkey. The project has been underwritten by a \$145,000 grant from WHO's Human Reproduction Unit.

Two principal studies will be conducted in each country: the relationship of family size to family health and the effect of childhood mortality on subsequent fertility. In India there will be three additional studies. In each country at least two subcultures will be investigated: Hindu and Muslim in India; Muslim and Christianity in Iran and Lebanon; and traditional vs. modern Muslims in Turkey.

* * *

Dr. Arthur J. Prange, Jr. of the UNC School of Medicine delivered an invitational address to the Congress of the International College of Neuropsychopharmacology in Prague, Czechoslovakia last month.

Dr. Prange, professor of psychiatry and director of research development, discussed the use of physiologic substances, amino acids and hormones in the management of certain psychiatric disorders. The findings depend in part on work done by Dr. Prange and his colleagues during his sabbatical leave with the British Medical Research in London during 1968-69. Since 1961 he has held a Career Development Award from the National Institute of Mental Health.

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Over the past year, nine members of the Duke medical faculty have moved into departmental chairmanships at other schools of medicine.

The most recent have been Dr. J. J. Vazquez, who became professor and chairman of the Department of Pathology at the University of Kentucky College of Medicine on Sept. 1, and Dr. M. Paul Capp, who became professor and chairman of the Department of Radiology at the University of Arizona in Tucson in August.

Another Duke faculty member who joined the University of Arizona this summer was Dr. Rubin Bressler, who became chairman of pharmacology there in July.

Already at Arizona for the past year as professor and chairman of obstetrics and gynecology is Dr. C. Donald Christian, who was an associate professor of obstetrics and gynecology and endocrinology at Duke.

Others who went into chairmanships include:

Dr. George D. Wilbanks, who became professor and chairman of obstetrics and gynecology at the Rush School of Medicine in Chicago in June.

Dr. Paul Horowicz, who left Duke last July to become chairman of physiology at the University of Rochester Medical Center.

Dr. Saul Boyarsky, who became professor and chairman of urology at the Washington University School of Medicine in St. Louis in July.

Dr. Henry D. McIntosh, who went to Baylor University as professor and chairman of the Department of Medicine in May.

Dr. Morton D. Bogdonoff, who became professor and chairman of medicine at the Medical Center of the University of Illinois in Chicago Jan. 1.

* * *

A 1943 Duke graduate, Dr. James M. Ingram, has been appointed professor and chairman of obstetrics and gynecology at the College of Medicine, University of South Florida in Tampa.

* * *

Dr. D. Bernard Amos, James B. Duke Professor of Immunology and Experimental Surgery, led a six-man scientific delegation to Russia during August for discussions on organ transplantation and transplantation immunology.

* * *

Dr. Raymond W. Postlethwait, a professor of surgery at Duke and chief of staff at the Durham VA Hospital, became director of the Sea Level Division of the Duke Medical Center Sept. 1.

His duties will include administrative responsibility for Duke's holdings in coastal Carteret County, including the 90-bed Sea Level Hospital which was given to Duke last year.

Dr. Postlethwait, a member of the Duke faculty for 15 years, is living at Sea Level.

* * *

Dr. Jay M. Arena, professor of pediatrics and director of Duke's Poison Control Center, is author of a comprehensive book on poisoning just published by

the Charles C Thomas Co. of Springfield, Ill.

The work is the 746-page, second edition of "Poisoning—Toxicology, Symptoms, Treatments," and deals with prevention and treatment of poisoning from all sources in adults and children.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Recently appointed members of the faculty of the Bowman Gray School of Medicine include:

Dr. John H. Edmonds Jr., associate professor of medicine. Dr. Edmonds, a cardiologist, for the past six years has been a member of the faculty of the Medical College of Georgia where he was director of the Heart Station and the Georgia Heart Association Outpatient Clinic. Each year for the past five years the students at the Medical College of Georgia have presented him an award for excellence in teaching. A graduate of Wake Forest College, Dr. Edmonds holds the M.D. degree from the Bowman Gray School of Medicine. He took internship and residency training at Wayne County (Mich.) General Hospital, studied as a fellow in cardiology at the University of Michigan and took a year of cardiovascular training at the Bowman Gray School of Medicine.

Dr. Melvin Levitt, associate professor of physiology. A neurophysiologist, he came to the medical school from the University of Pennsylvania School of Medicine where he was an assistant professor. He holds the B.S. and M.A. degrees from Roosevelt University and the Ph.D. degree from Michigan State University. He took three years of postdoctoral training at the University of Pennsylvania and was engaged in special studies in neurophysiology at Rockefeller University. In addition to his teaching responsibilities, he will conduct research in the areas of neurophysiology and neurobiology.

Dr. Stephen G. Anderson, assistant professor of obstetrics and gynecology. He recently completed two years of military service during which he was chief of hospital services at the U. S. Air Force Base at Myrtle Beach, S. C. He attended Emory University School of Medicine. He interned at Grady Hospital and completed residency training at North Carolina Baptist Hospital. He also took a year of postdoctoral research training in reproductive biology at Bowman Gray. His research interests involve studies on uterine blood flow and the application of ultrasound in obstetrics and gynecology.

Dr. Robert A. Finch, assistant professor of anatomy. He recently completed three years of postdoctoral training at Brandeis University. He holds the A.B. degree from Oberlin College and the Ph.D. degree from Case Western Reserve University. He will have responsibilities in teaching and research. His research interests involve the development of the limb system.

Dr. Phillip M. Hutchins, assistant professor of physiology. Dr. Hutchins, who recently completed a year of postdoctoral training in physiological research at Harvard University and Peter Bent Brigham Hospital, will have responsibilities in biomedical engineering as well as in the teaching and research programs of the Department of Physiology. His research interests include microcirculation and hemorrhagic shock. He holds the B.S. degree from N. C. State University and the M.S. and Ph.D. degrees from Wake Forest University.

Dr. John S. Kaufmann, assistant professor of medicine and pharmacology. He is returning to the Bowman Gray faculty after two years of special training in clinical pharmacology at Vanderbilt University Medical Center. He will be in charge of a clinical pharmacology unit which is being established in the Department of Medicine. Dr. Kaufmann, a 1956 graduate of the Bowman Gray School of Medicine, holds the B.S. and Ph.D. degrees from Wake Forest University. He is a member of Phi Beta Kappa and Alpha Omega Alpha. He interned at Pennsylvania Hospital and took residency training at North Carolina Baptist Hospital.

Dr. Louis S. Kucera, assistant professor of pharmacology. A virologist, Dr. Kucera for the past four years has been associated with the virology laboratories of St. Jude Children's Research Hospital, Memphis, Tenn., where he also was an assistant professor of microbiology at the University of Tennessee Medical Units. He holds the B.A. degree from St. John's University, the M.S. degree from Creighton University and the Ph.D. degree from the University of Missouri. He also took two years of postdoctoral work in microbiology at Mayo Clinic. His research deals with antiviral agents and with the biochemistry of tumor virus replication.

Dr. Glenn R. Clark, Jr., assistant professor of biosciences in the Division of Allied Health Programs. He also will serve as director of biosciences for that division. For the past five years he has been an instructor in anatomy at Emory University School of Medicine. He is a former member of the faculty of Wake Forest University. He holds the B.S. degree from Wake Forest University and the M.D. degree from the Bowman Gray School of Medicine.

Dr. Robert J. Cowan, instructor in radiology. Dr. Cowan, who recently completed residency training in radiology at North Carolina Baptist Hospital, will have responsibilities in nuclear medicine and will participate in the teaching, research and patient care programs of the Department of Radiology. He holds the A.B. and M.D. degrees from the University of North Carolina at Chapel Hill. He is a member of Phi Beta Kappa and Alpha Omega Alpha. He recently was named a James Picker Foundation Scholar in Radiology.

Dr. Archie T. Johnson, Jr., instructor in pediatrics. Dr. Johnson, a neonatologist, will direct a neonatal intensive care nursery which is being established at

the medical center by the Department of Pediatrics. He recently completed a year of postdoctoral training in neonatology at Duke University. A graduate of Davidson College, he received the M.D. degree from the Medical College of Virginia and took internship and residency training at Charlotte Memorial Hospital and at North Carolina Baptist Hospital.

Dr. Wayne A. Krueger, instructor in anatomy. He received the Ph.D. degree in June from the University of Illinois. He holds the A.B. and M.S. degrees from John Carroll University. In addition to his teaching responsibilities, he will conduct research in reproductive biology and endocrinology.

* * *

Dr. John P. Gusdon, Jr., associate professor of obstetrics and gynecology, and Dr. Quentin N. Myrvik, professor and chairman of the Department of Microbiology, participated in the International meeting of the Reticuloendothelial Society July 27 in Frieberg, Germany. Dr. Gusdon presented a paper on "Immunological Aspects of Reproduction." Dr. Myrvik is president of the Reticuloendothelial Society.

* * *

Dr. Hugh B. Lofland, Jr., professor of pathology, recently was appointed to a four-year term as a member of the Animal Resources Advisory Committee of the Department of Health, Education and Welfare. The appointment was effective July 1.

* * *

Dr. Robert W. Cowgill, professor of biochemistry, presented a seminar on "Proton Association from Excited State Molecules" July 25 in the Biology Division of Oak Ridge (Tenn.) National Laboratory.

* * *

Dr. C. Douglas Maynard, associate professor of radiology, and Dr. Richard L. Witcofski, associate professor of radiology, each conducted teaching sessions at a recent meeting of the Society of Nuclear Medicine in Washington, D. C. Dr. Maynard presented a session on "Brain, Dynamic Scanning and Cisternography." Dr. Witcofski's session was entitled "Instrument Limitations: Camera and Rectilinear Scanning."

* * *

Dr. John A. Stanley, assistant professor of ophthalmology, presented a paper on "Silicone Impregnation of the Corneal Stroma" at the annual meeting of the American Medical Association in Chicago, Ill.

NEWS NOTES FROM THE NORTH CAROLINA REGIONAL MEDICAL PROGRAM

A ten-day course in three sessions is scheduled for professional nurses in North Carolina who are interested in increasing their skill in nursing assessment and care of the ambulatory patient in physicians' offices, hospital out-patient departments and emergency rooms, health department clinics, industry, and similar settings. "Innovations in Clinic Nursing: Patients, Personnel, Practices" takes place at the University

of North Carolina School of Nursing, Chapel Hill, November 30-December 2 and April 26-27, with individually scheduled sessions in a clinical area planned for five days in January, February, or March. Brochures have been mailed to medical societies and group practices in the state. "Innovations in Clinic Nursing" is funded by the North Carolina Regional Medical Program as part of its emphasis on continuing education.

* * *

Another N. C. RMP continuing education program, initiated to improve cardiovascular health services in Western North Carolina, is the "Heart Consultation and Education Program" for physicians. Over a year's period there has been a total physician attendance of approximately 160 at a monthly cardiovascular lectureship series at Memorial Mission Hospital, Asheville, held in conjunction with Bowman Gray School of Medicine.

Other features of the program are a teaching clinic and patient consultation services. The heart experts appearing as lecturers spend the night in Asheville and serve as consultants the following morning to physicians with problem patients in cardiology. Lecturers and consultants are from the state's three medical schools.

The project also tests the feasibility of a cooperative educational program among Duke, Bowman Gray, and UNC schools of medicine.

* * *

In the first 11 months of its operation, N. C. RMP's "Coordinated Oncology Chemotherapy" project, based at Bowman Gray School of Medicine, entered 145 patients into standardized protocol to provide data on individual cases and group evaluation of specific plans. New therapy, basic pharmacology, new drugs, and biological concepts are involved. Presentation of the chemotherapy concept of treating cancer has been made by project staff at a number of medical meetings, with a total attendance of 250 physicians.

Approximately 114 Tarheel physicians are actively involved in the project through treating patients with chemotherapeutic agents in their home town settings. The patients thus receive the most up-to-date chemotherapeutic treatment, while physicians gain experience using chemotherapy in their office settings, knowing that consultants are immediately available from the medical teaching center—Bowman Gray—to answer questions in case of emergency.

A new advisory group for N. C. RMP's Central Cancer Registry includes 15 North Carolina health experts. Dr. James F. Newsome, UNC School of Medicine, is chairman. Other members are: Dr. William Shingleton, Dr. Siegfried Heyden, and Dr. William M. O'Fallon, Duke Medical Center; Dr. Donald Hayes and Dr. Richardy Myers, Bowman Gray School of Medicine; Dr. Gary Koch and Dr. Gerald Hanks, UNC School of Medicine; Dr. Herbert Z. Lund, Cone Memorial Hospital; Dr. Lockert Mason, New Hanover Memorial Hospital; Dr. John Brabson, Hawthorne Medical Center; and from Rocky Mount, Dr. Lewis Thorp.

Ex-officio members are Dr. Theodore D. Scurletis, State Board of Health; Dr. F. M. Simmons Patterson, N. C. RMP Executive Director; and Jo Ann Olsen Administrative Director of the Registry.

The Central Cancer Registry, one of five ongoing cancer projects sponsored by North Carolina Regional Medical Program, provides a state-wide uniform comprehensive method of collecting, storing, and retrieving computerized data. Through the registry, vital cancer information can be furnished immediately to physicians, hospitals, and medical schools, and ultimately improve care for cancer patients.

The North Carolina Board of Health, which helped develop the registry, will soon be assuming responsibility for its administration.

* * *

The fourth training course for nurses in coronary care units, part of N. C. RMP's Coronary Care Unit Training and Development project, takes place October 1 through October 30. The course includes two days of introduction for nurses inexperienced with electronic monitors, and thereafter—for all participants—a one-week didactic session at Charlotte Memorial Hospital.

Following will be three weeks of practical training on a preceptor basis in the coronary care unit of a cooperating hospital. The three previous courses have involved a total of 106 nurses.

Physician education in the use of electronic devices, diagnostic methods, and drugs is a new phase of the coronary care project. In cooperation with Bowman Gray School of Medicine, it takes the form of a two-week fellowship, with each physician undergoing a pertinent course of study outlined according to individual needs.

Initial planning for this project, administered by the North Carolina Heart Association, was begun in 1967 when there were seven coronary care units in the state. When the project completed its second year of operation in June, there were 54 units with 23 others in the proposed or developmental stage.

* * *

An award of \$2,639,228 for the 1970-1971 fiscal year has been made to the North Carolina Regional Medical Program, headquartered in Durham, from the Department of Health, Education, and Welfare, according to F. M. Simmons Patterson, M.D., executive director of N. C. RMP.

The amount will finance 20 projects in the State of North Carolina through the federally-supported Regional Medical Program, aimed at delivering better health care to more North Carolinians at lower cost.

Among them is a new project, Training of Physician's Assistants, already in operation at Duke Medical Center and N. C. Baptist Hospital of Bowman Gray, Winston Salem.

The allotment of \$183,321 will permit expansion of this program aimed at relieving the critical shortage of health manpower. At present 52 physicians' assistants are being trained by Duke and nine by Bowman Gray to relieve the physician of time-consuming tasks which

do not require his level of skill. Project director is Robert Howard, M.D., Duke Medical Center.

Also included is the renewal of the Medical Library Extension Service for a two-year period to develop good local medical libraries and provide reference service for the North Carolina medical community.

Renewed for one year is the Cancer Information Service for physicians.

Directors of these projects are G. S. Terence Cavanagh, Duke, and James A. Bryan, M.D., University of North Carolina School of Medicine.

NORTH CAROLINA BLUE CROSS AND BLUE SHIELD

Building plans for a new home office operations center on the Durham-Chapel Hill Boulevard have been announced by North Carolina Blue Cross and Blue Shield. President J. A. McMahon said the building, of contemporary design, will have a working area of approximately 225,000 square feet and will represent an investment of around \$7 million.

The Corporation has filed for a special use permit to begin construction of the four-story building on a 38-acre site which it owns midway between Chapel Hill and Durham, at the Durham-Orange County line.

McMahon said preparation of the site will get underway soon after the use permit is granted. Construction of the building is tentatively scheduled to begin shortly after the first of the year. It is expected to take about two years to complete the project, with occupancy in the late fall of 1972.

The Building Division of the Nello Teer Company of Durham has been awarded the general construction contract.

Designed by the firm of A. G. Odell and Associates, Architects, of Charlotte, the new building is in the shape of a rhomboid—a three dimensional parallelogram that achieves simplicity of design and economies of maintenance.

The new structure will replace seven of the eight buildings which now serve as home offices for North Carolina Blue Cross and Blue Shield in the Durham-Chapel Hill area, McMahon said.

When North Carolina Blue Cross and Blue Shield operations are brought together under one roof at the new operations center, substantial economies will result, McMahon said.

"We lose efficiency today because we are spread out in so many locations. Time is lost in travel between locations, and we need to house our regular Blue Cross and Blue Shield activities together to improve internal communication. The end result will be a considerable saving in overhead, which will be reflected in the fees for service paid by our groups and individual subscribers."

BOOK REVIEW

A Doctor Looks at Heart Trouble. By Faye C. Lewis, M.D. 154 pages. Price, \$4.95. New York: Doubleday & Company, Inc., 1970.

This book is a complete and honest discussion of heart disease, designed not only for the patients themselves, but for the families who must live with the patient during the recovery period and later, constantly in fear of another attack. The book is also a physician's candid recording of the disappointments, frustrations, and self-criticisms that attend almost all doctors' dealings with heart patients and their families.

Dr. Lewis, who in 1921 became the first woman to receive an M.D. from Washington University in St. Louis, begins with a survey of the various forms of heart trouble and then goes on to discuss such specific malfunctions as imperfect heart valves, congestive heart disease, the coronary attack, and the aging heart, providing details on both symptoms and prescribed treatment. Up-to-date, nontechnical answers are provided to such questions as the relationship of cigarette-smoking to heart disease, the role of the diet both in preventing and in causing heart attacks, and the effectiveness of the physical examination in detecting heart disorders.

In Memoriam

Frank Howard Richardson, M.D.

One of Black Mountain's most beloved citizens, Dr. Frank Howard Richardson, died May 26 in Oteen Hospital. He was 87 years old.

Dr. Richardson was well known as an author in the field of medicine and as a pediatrician. He was often seen in Black Mountain until very recently, having remained extremely active for a man of his age. He always wanted to be doing something, and his constant activity helped him meet many people and gain many friends.

Dr. Richardson began coming to Black Mountain from Brooklyn, N. Y., in 1920 to escape the summer heat of the city. He set up the Children's Diagnostic and Nutritional Clinic in Black Mountain, where area children could come for a complete check-up.

In the thirties Dr. Richardson gave up his Brooklyn practice and moved to Hilltop, a 13-acre wooded hill in Black Mountain, and kept the Children's Clinic open throughout the year. A few years later he opened pediatric offices in Asheville.

He was the author of a number of books dealing with the problems of growing up and of raising children. Among his 16 books were "For Boys Only," "For Girls Only," "The Nursing Mother," "How to Get Along With Children," and "The Nervous Child and His Parents."

Active in civic affairs, Dr. Richardson formerly served 11 years as a member of the Black Mountain board of aldermen, also serving as vice mayor and

interim mayor. He was closely associated with Black Mountain Friends of the Library, had been a Boy Scout leader, and was a member of the Lions Club, Chamber of Commerce, and American Association of Retired Persons.

Dr. Richardson, a native of Brooklyn, was educated at Cornell University and did postgraduate work in Vienna and Berlin. He was a co-founder of the Southern Pediatric Seminar at Saluda, where family doctors and pediatricians heard lectures on treating children.

An active member of Black Mountain's First Baptist Church, he was formerly Sunday School superintendent and a member of the choir.

Dr. Richardson was the father of Dr. Howard Richardson of New York City, playwright and author of "Dark of the Moon."

Also surviving are the widow, Mrs. Clara Dixon Richardson; two daughters, Mrs. Victor A. Gauthier, Jr., of Alexandria, Va., and Mrs. Tom C. Inness of Knoxville; two other sons, Dr. Dixon Richardson of Long Beach, Calif., and Raymond Richardson of Rockville, Md.; and 12 grandchildren.

James Robert Adams, M.D.

Dr. James Robert Adams was a member of this society who practiced pediatrics in Charlotte for 38 years. He arrived here in 1932 as a young honor graduate of the University of Virginia, and during his first year he won the State Medical Society's annual award for his paper on hypoglycemia in the newborn. Apparently he had time to prepare it well, because he told with relish that his total collections for his first three months in practice were 85 dollars.

Times changed during his 38 years in Charlotte: from the two-dollar office visit and the three-dollar house call; from his first dramatic cure of a child with pneumonia using an experimental drug called sulfa; from the war years with their brutal seven-day work week; from the nightmare summer of 1948, when he admitted to the hospital seven new cases of polio in one day.

Times have changed, and Bob Adams was a vital part of the change. It is with a sense of deep appreciation that we recognize his contribution to this society and what it stands for, for his outstanding enthusiasm of his early years, for his steadfast dedication to his patients in trying times, and for his quiet courage in recent years.

Mecklenburg County Medical Society

Walter Monroe Summerville, M.D.

Walter Monroe Summerville was born in Berryhill Township April 28, 1906, thus having the unique distinction of being one of the few native Mecklenburg County physicians to settle and practice in his county of birth.

He was the son of Clarence A. and Theresa Sloan Summerville, and received his Doctor of Medicine

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degree from Emory University.

While attending the University of North Carolina at Chapel Hill in 1931-1934, he was a research fellow and laboratory instructor at the University of North Carolina School of Medicine.

Upon coming to Charlotte to practice in 1936, he trained as a clinical pathologist under the late Dr. Harvey P. Barrett, later becoming associated with him in the practice of medicine and pathology; and following Dr. Barrett's death, he continued as a clinical pathologist in the private practice of medicine as well as being the clinical pathologist and head of the laboratories at both Presbyterian and Mercy Hospitals.

Dr. Summerville's contributions to Forensic Medicine in Mecklenburg County and the State of North Carolina cannot be praised too highly. Realizing the importance of the office, he served as coroner for Mecklenburg County for 23 years and led the fight that resulted in the necessary legislation to establish medical examiners. After such legislation was passed, he became Mecklenburg County's first medical examiner, an office he held until he voluntarily retired to devote more time to his private practice and family. His devotion and dedication to forensic medicine placed Mecklenburg County first in the state, in the proper examination of criminal and other coroner-related problems.

Dr. Summerville was a member of the American Medical Association, the Medical Society of the State of North Carolina, and the Mecklenburg County Medical Society. He was also president of the North Carolina State Division of the International Association of Identification. He sustained membership in the North Carolina Pathological Association, and was a life member of the Southern Medical Association.

For a number of years, he worked diligently for the American Cancer Society, and tried to establish a specific morgue for Mecklenburg County.

His activities were not confined to medicine. He was an active member of the Civitan Club and a Deacon of the First A.R.P. Church.

In 1934 he married the late Mary Alma McGeurt, and they were blessed with five children, three sons and twin daughters. After her untimely death in 1956, he married the former Kaye Burns, in 1958, who survives. He is also survived by two brothers and six grandchildren.

We, his colleagues, are most appreciative of the contribution Dr. Summerville made in the advancement of medicine in Mecklenburg County. During the 23 years he served as coroner, we were fortunate to be assured of proper scientific investigation and not to be concerned that undiagnosed medical problems would be investigated by non-medical personnel—as was the case in the remaining counties of North Carolina. We were also grateful to him for his many years of service as a private practicing pathologist, who provided us with much needed laboratory facilities.

To Mrs. Summerville, his children, grandchildren, and friends, we express our deepest heartfelt sympathy in their loss. Mecklenburg County Medical Society

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Commissioned by the NIMH's Center for Studies of Suicide Prevention, the thirty-minute play was written by Elizabeth Blake, a professional playwright, under the auspices of Plays for Living, a Division of the Family Service Association of America. It is expressly designed for presentation by amateur drama groups at community group meetings, PTA meetings, schools and colleges, churches, mental health association meetings, YMCA workshops, institutes, community centers, conferences, and conventions.

A reading copy of "Quiet Cries" will be sent without charge upon request to the Center for Studies of Suicide Prevention (Information Services), National Institute of Mental Health, 5454 Wisconsin Avenue, Chevy Chase, Maryland 20015. Any group desiring to put on a production of the play may then request a free production packet.

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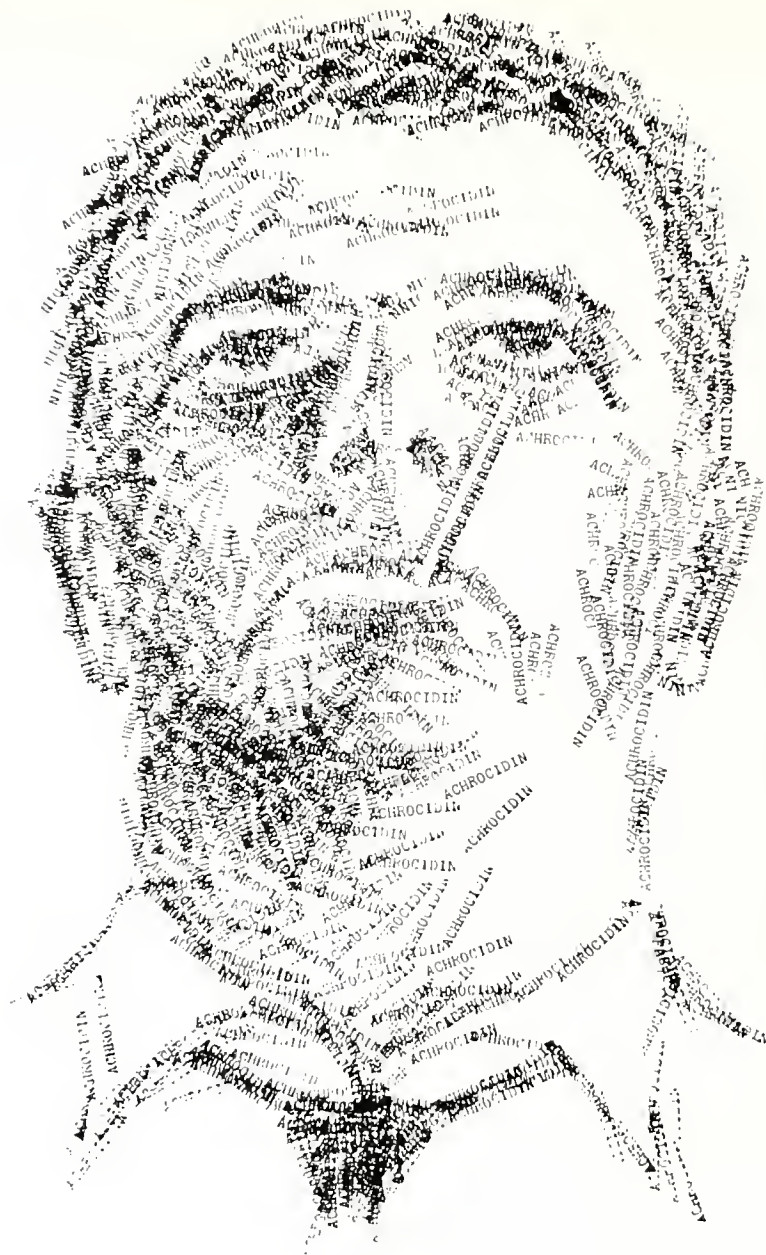
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IN THIS ISSUE:

Surgical Treatment of Coronary Artery Disease

FRANCIS ROBICSEK, M.D., HARRY K. DAUGHERTY, M.D.

DONALD C. MULLEN, M.D. AND EMANUEL BAGBY



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Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triam-

terene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Anti-hypertensive effects may be enhanced in post-sympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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Surgical Treatment of Coronary Artery Disease

FRANCIS ROBICSEK, M.D., HARRY K. DAUGHERTY, M.D.
DONALD C. MULLEN, M.D. AND EMANUAL BAGBY

The treatment of myocardial ischemia carries two objectives: the alleviation of the symptoms and the therapy of the underlying pathologic process. Until recent years the surgeon had only a very limited role in the management of the coronary patient. Advances in the accurate diagnosis of occlusive coronary arterial lesions by cineangiography as well as improvements in surgical techniques make it now feasible to employ the direct approach in the surgical management of localized coronary arterial lesions in diffuse coronary arterial disease as well as in some of the complications of myocardial infarction.

The purpose of this paper, in the mirror of our own experiences, is to give the reader a brief summary on the present state of coronary arterial surgery.

I. Congenital Malformations

Malformations of the coronary arteries can be manifest in their number, origin, distribution, and drainage. While all these conditions may have some significance in one clinical aspect or another, from a therapeutic standpoint only the last—abnormal coronary arterial drainage—holds particular interest.

Although most cases of abnormal coronary arterial drainage are simply identified as "coronary arteriovenous fistulas," there

are three distinct variations: (1) coronary artery draining directly into a cardiac chamber, (2) coronary artery draining into the pulmonary artery, and (3) "true" coronary arteriovenous fistula—that is, direct communication between the coronary arterial and venous systems.¹ While the hemodynamic picture in anomalous coronary arterial drainage is that of a systemic arteriovenous fistula with an intracardiac shunt, clinically, in most of the cases symptoms of myocardial ischemia prevail.

The possibility of abnormal coronary arterial drainage should be primarily considered if (a) a newborn or a child shows clinical and/or electrocardiographic signs of myocardial ischemia, or (b) there is a continuous "machine"-type murmur audible at a location different from that of a patent ductus arteriosus.

The treatment of this disease is surgical, and it consists of suture-ligation of the abnormal communication. We have treated four such patients by this method with excellent results.² Most recently, Cooley³ advised that in cases of coronary arterial drainage into the pulmonary artery, the abnormal vessel should not simply be ligated but anastomosed to the ascending aorta—a recommendation with a certainly sound physiological basis.

Note: The prognosis of the untreated anomalous coronary arterial drainage is ominous. The diagnosis is easy to make, and surgical treatment is not difficult. The cornerstone in the management of this disease is to think of its possibility.

From the Department of Thoracic and Cardiovascular Surgery, the Heineman Research Laboratory, Charlotte Memorial Hospital, Charlotte, North Carolina.

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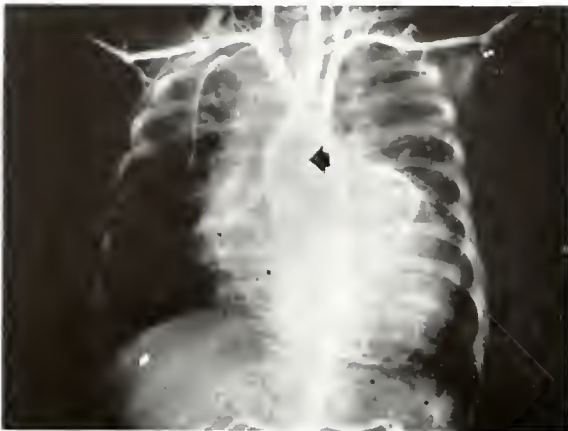


Fig. 1. Aortogram of an infant with the left coronary artery anatomically arising from and hemodynamically draining into the pulmonary artery. While the right coronary artery originates from the ascending aorta, the left coronary artery is notably absent. Also observe the early opacification of the pulmonary artery (arrow).



Fig. 2. "True" coronary arteriovenous fistula (right coronary artery communicating with the coronary sinus) in a four-year-old child. Note the tremendous dilatation of the afferent artery (arrow).

II. Surgical Treatment of Angina Pectoris: Operative Methods to Prevent Myocardial Infarction

During the past 50 years surgical procedures have been recommended for the treatment of myocardial ischemia ranging from cardiac denervation to epicardial abrasion. Most of these procedures did not withstand objective evaluation and have been abandoned. The modern concept of surgical treatment in occlusive coronary ar-



Fig. 3. Arteriovenous aneurysm of the anterior descending coronary communicating with the right ventricle.

terial disease is based upon recognition of the fact that obstructive lesions in the coronary system are frequently localized to or close to the origin of the three principal arteries, and the rest of the coronary vascular tree is often spared occlusions.¹

It is peculiar that the most significant event in the history of myocardial revascularization was not the successful application of one surgical method or another, but the development of the diagnostic method of coronary cineangiography by Sones² in 1958. This procedure proved not only to be simple and safe, but also to be the best available method to separate "true" angina pectoris from functional disorders. During the past four years more than 600 coronary cinearteriograms were performed in our laboratory, with only one death—a patient who suffered an acute myocardial infarction one hour following the examination. These studies supplied us with otherwise unobtainable information about the severity of the disease and the extent and location of the occlusive changes.

Besides the above data, contrast-injection studies of the coronary arteries also served

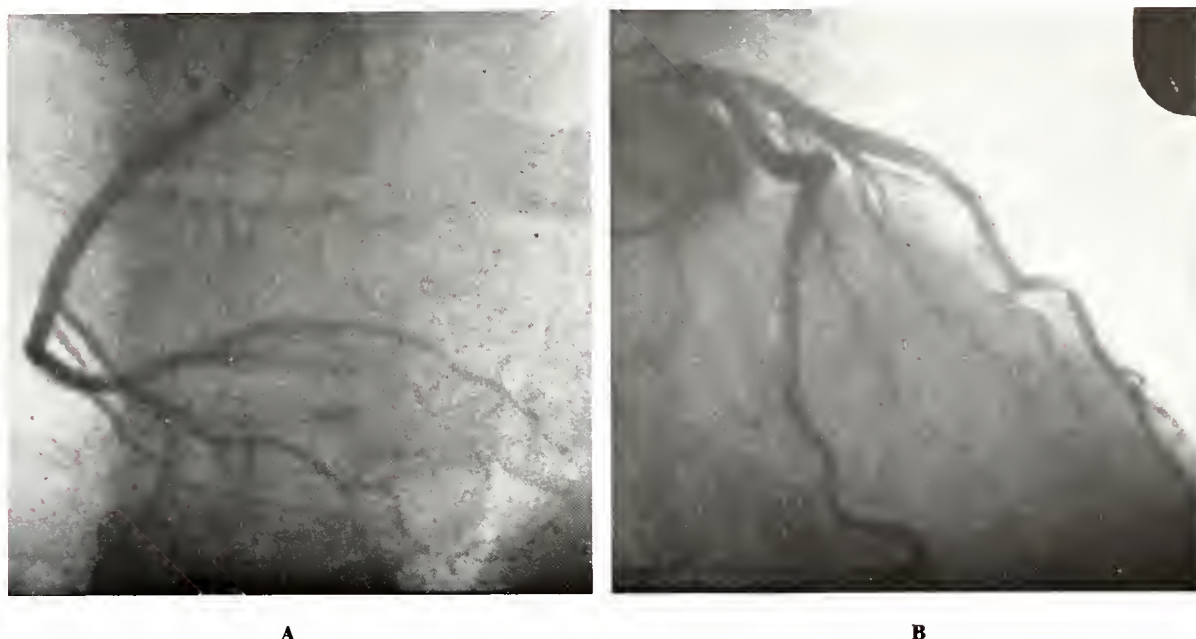


Fig. 4. Normal coronary cineangiogram and left ventriculogram: (A) right coronary artery, (B) left coronary artery.

as an objective method to evaluate the effectiveness of different operations recommended for reconstructive coronary arterial surgery. From these many different procedures, only a few withstood the acid test of coronary arteriography:

A. Direct procedures

The first "direct" surgical approach to the occluded coronary artery was made by Bailey⁶ in 1957. In spite of sporadic reports on the effectiveness of different "direct" procedures, these operations were slow to be accepted, because the operative risk was prohibitive and the late results were poor. During the past two years this situation changed dramatically. At the present the following types of operations are in use:

1. *Coronary endarterectomy*^{6,7} is applied primarily on vessels which are occluded throughout most of their length and thus are unsuitable for bypass operations. Endarterectomy may be combined with carbon dioxide dissection or application of autogenous vein or pericardium "patch" graft.^{4,8}

2. *Graft replacement.* The method of resection and replacement of the occluded

coronary artery with a saphenous vein graft was introduced by Effler and colleagues⁴ for segmental lesions, but because of technical considerations, it is now largely abandoned in favor of bypass grafts.

3. *Coronary bypass grafting.* This method of myocardial revascularization was based on the principle of arterial autogenous vein bypass in the lower extremities developed by Linton.⁹ Coronary bypass grafts were popularized by Adams¹⁰ and Effler and others.⁴ With this technique, a long vein graft can be brought from the ascending aorta to virtually any segment of the coronary arterial system. The operation, which is done in cardiopulmonary bypass on the artificially fibrillated heart, has surpassed all other methods, both in simplicity and effectiveness. So far we have performed 40 direct procedures, with a hospital mortality of three patients. Our enthusiasm generated by the first case is indeed increasing, and we believe that this operation is the most effective way to achieve surgical palliation of coronary heart disease presently available.

B. Indirect procedures

In 1945 Vineberg¹¹ introduced the concept



Fig. 5. Right (A) and left (B) coronary cineangiogram demonstrating localized occlusion of the mid-portion of the right coronary artery (arrow) and a normal left coronary arterial tree—a situation most suitable for bypass grafting of the right coronary artery.

that a systemic artery implanted into the ischemic myocardium can indeed improve its blood supply. The Vineberg operation, which utilizes the denuded internal mammary artery as an implant, was slow to gain popularity, but when in 1962 Sones and Shirey⁵ demonstrated its value by objective clinical evaluation, it became widely accepted as a method of choice of myocardial revascularization. Sewell¹² modified Vineberg's original procedure by implanting not only the mammary artery, but using a "pedicle" consisting of the artery as well as the vein and intercostal muscle. Effler and colleagues¹ combined the two procedures by using the "pedicle" up to the point of myocardial insertion, but implanted the mammary artery only into the myocardial tunnel. They also utilized both mammary arteries dissected through a mid-line sternotomy incision to revascularize more effectively the ischemic heart.

The Vineberg operation and its modifications proved to be an effective method of surgical palliation in a great number of patients and has an acceptable rate of surgical mortality. During the past five years we have performed the operation 102 times.

The majority of the patients improved significantly and the hospital mortality remained below 7%. It became evident, however, that the mammary artery implantation has several disadvantages: the delayed onset of its benefits,^{11,13} its frequent failure outside the critical "best candidate group,"¹³ and the high mortality rate in patients affected with triple-vessel disease.¹⁰ These factors led most cardiac surgeons to perform fewer and fewer mammary artery implantations in favor of coronary bypass grafts. At the present we perform the Vineberg operation only if direct procedures cannot be performed because of extensive distal involvement of the narrowed coronary artery, or in conjunction with coronary artery grafts.

Surgical Complications of Myocardial Infarction

The management of acute myocardial infarction is and undoubtedly will remain a medical problem, but as the patient progresses toward either recovery or death, complications may arise in which the surgeon can be of assistance. Some of these problems belong to a medicosurgical "no man's land," and the direction the management of these

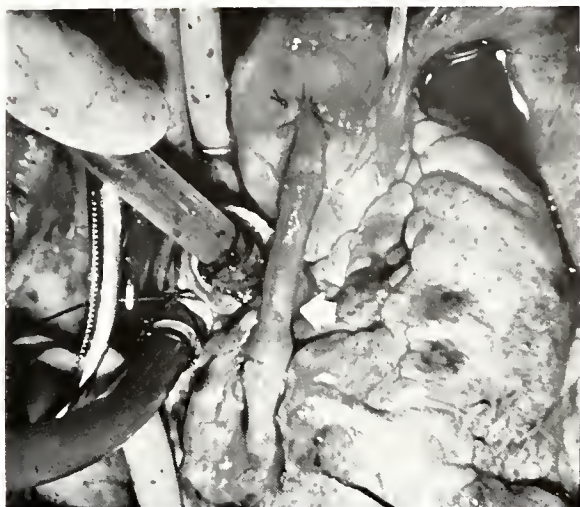


Fig. 6. Operative photograph of the patient whose coronary arteriogram is demonstrated on Fig. 5. The arrow points at the autogenous saphenous vein graft which reaches from the ascending aorta to the right coronary artery distal to the occluded segment.

patients takes depends on whether the institution is blessed with a surgically oriented internist or a medically oriented surgeon. Other complications, however, definitely require the services of a cardiovascular surgeon.



Fig. 8. Operative photograph of the patient whose cineangiograms are demonstrated on Fig. 7. Both the right and left coronary arteries are bypassed with autogenous saphenous vein grafts (arrows) reaching from the ascending aorta to the distal right coronary and to the left circumflex branch.

A. Cardiac arrest (ventricular fibrillation)

Cardiac arrest is the most frequent complication—or, we may say, outcome—of coronary occlusion. The first successful cases of



Fig. 7. Coronary cineangiogram of a patient with severe occlusive arteriosclerosis of both coronary arteries. The right coronary artery (A) is severely narrowed at its mid-portion (arrow). The left coronary cineangiogram demonstrates advanced arteriosclerotic changes in the anterior descending branch and complete occlusion (arrow) of the circumflex coronary artery.



Fig. 9. Left coronary arteriogram of a patient with severe occlusive arteriosclerosis of the left coronary artery. The main trunk is open as is the circumflex branch, but the latter is narrow and irregular. The anterior descending branch is completely occluded (arrow). This is a situation where bypass grafting is not feasible but which could be palliated by mammary artery implantation.



Fig. 10. Operative photograph of the patient whose cineangiograms are demonstrated on Fig. 9. Note the mammary artery (arrow) implanted into the ischemic portion of the left ventricular myocardium.

cardiac resuscitation were done in the operating room, using thoracotomy and "open" cardiac massage. The establishment of coronary care units and the introduction of the technique of "closed" cardiac massage make it possible now to resuscitate a large number of patients without the necessity of a hastily performed thoracotomy. Although most of the patients (if they respond at all) will respond indeed to a properly executed "external" cardiac massage, we should not forget that, short of cardiopulmonary bypass, direct massage is still the most effective method to provide blood flow while the heart is still in standstill. We ourselves had the gratifying experience of resuscitating four patients by thoracotomy and internal cardiac massage in whom well performed measures of external resuscitation were of no avail. It is our strong belief that if the patient's condition seems to deteriorate while resuscitation is being attempted with methods short of a thoracotomy, and his general status otherwise still offers some ray of hope, consideration should always be given to direct cardiac massage as an alternative procedure.

B. Heartblock

Heart block is a frequent companion of coronary heart disease. The ominous prognosis of this condition is well known. According to large statistics, the mortality at the end of the first year exceeds 60 per cent. This unpredictable and highly lethal natural course has made even the most conservative accept pacing as a treatment of choice in atrioventricular dissociation. Other conditions, such as sinus bradycardia or atrial fibrillation with a slow ventricular frequency which may cause an abnormally slow heart rate, usually respond well to conservative measures and require long-term cardiac pacing less frequently.

If brady-arrhythmia occurs in the acute phase of myocardial infarction, it should be handled by insertion of a temporary catheter electrode, which is a simple and most effective method to help the patient through the initial phase and provides a "wait-and-see" period. If sinus rhythm fails to return within a week or episodes of brady-arrhythmia continue, a permanent "demand" type of electronic pacemaker should be implanted.

Disturbances of the cardiac rhythm associated with a low pulse rate and/or brief



Fig. 11. Contrast-injection of the left mammary artery two years following its implantation into the left ventricular myocardium. Note the collateral circulation to the branches of the occluded anterior descending coronary artery.

periods of asystole can also occur in the chronic stage of coronary heart disease. If these disturbances are recent they are handled by the method described above, but if atrioventricular dissociation persists for a considerable time, the insertion of a temporary pacer may as well be bypassed and a permanent, fixed-rate pacemaker implanted.

We prefer the transvenous (jugular vein) pacer, with the battery pack buried under the pectoralis muscle. During the past five years we have implanted 167 pacemakers with this method,^{14,15} and on only three occasions were we obliged to choose the epicardial route. Transvenous application is a

simple and safe procedure. It is done with local anesthesia and is well tolerated by even the very old and the very ill. A satisfactory pacing response was obtained in all these patients, and there was no surgical or hospital death in the series.

C. Thromboembolic phenomena

Thromboembolic phenomena occur quite often following myocardial infarction. The surgical management of emboli originating from a mural thrombus does not differ considerably from the treatment of acute embolic occlusion in general. We believe that all arterial emboli which threaten the circulation of a vital organ or limb should be immediately removed. The introduction of the Fogarthy catheter⁶ greatly simplified the operative technique and at the same time dramatically improved the results. Now, most of these operations are performed with the use of local anesthesia and through small incisions. Before the introduction of the Fogarthy catheter into the surgical armamentarium, we operated on 18 patients for embolic occlusion of the abdominal aorta. Six lives and three limbs were lost. In contrast, only two patients and one limb were lost in 19 transfemoral Fogarthy embolectomies involving the lower aortic and iliac segments. Naturally not all aortic emboli can be removed by the retrograde technique, but even in these cases the Fogarthy catheter remains a valuable adjunct.

D. Mitral regurgitation

Mitral regurgitation can develop as an early or a late complication of ischemic heart disease, and if it occurs it is certainly an ominous event, because it puts hemodynamic strain on the already severely damaged heart.

Proper function of the mitral valve depends on two anatomic factors: the valve leaflets and the suspension apparatus (fibrous annulus, chordae, and papillary muscles). In contrast to rheumatic heart disease, occlusive coronary arteriosclerosis seldom leads to damage of the valve leaflets, but it often causes malfunction of the suspension apparatus. This malfunction could be due to

diskynesia, dilatation of the annulus, elongation of the chordae, noncontractile papillary muscle or muscle base, or disruption (fracture of the chordae, detachment of the papillary muscle).

Naturally, whatever the cause of mitral regurgitation, the lesion could be (and if the regurgitation is severe enough it certainly should be) corrected by valvuloplasty or by valve replacement. In our experience, valve excision and replacement with a prosthesis yielded more favorable results than valvuloplasty alone. We have also observed that the patients who had disruption rather than diskynesia responded better to surgical treatment. The reason for this could be that a localized, however severe, trauma to the myocardium is more likely to cause necrosis and disruption, while a diffuse myocardial ischemia is more apt to cause diskynesia. Altogether, 11 patients on our service have been operated on for mitral incompetence caused by ischemic heart disease.¹⁶ There were no operative deaths, but one patient was lost during the postoperative period because of bacterial endocarditis.

E. Post-infarction ventricular aneurysm

Development of a post-infarction ventricular aneurysm is an ominous prognostic sign. This complication threatens the patient's life and endangers his chances of recovery (1) by the increased danger of ventricular rupture with resulting cardiac tamponade, (2) by formation of a mural thrombus, and (3) by the development of heart failure because of paradoxical pulsation of the ventricular wall.

In spite of these considerations, the operative indications for ventricular aneurysms should be approached with caution. Small ventricular aneurysms apparent on x-ray examination may turn out to be merely a bulging portion of the left ventricle pulsating paradoxically.³ We have seen several of these so-called pseudo-aneurysms disappear after a few months. Giant aneurysms also deserve careful consideration. Usually they represent a massive infarction which destroyed most of the contractile tissue of the left ventricle. The left ventricle is emptied amazingly well

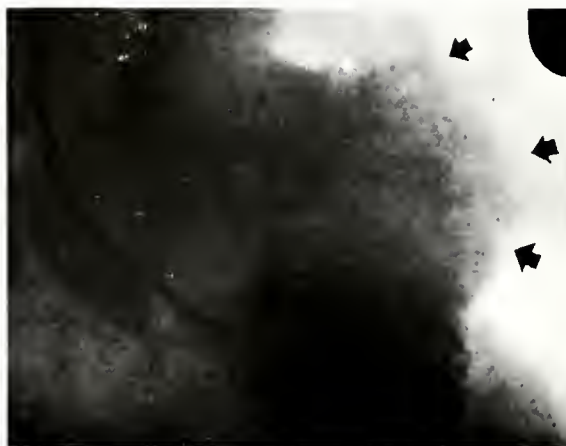


Fig. 12. Left ventriculogram of a patient with a huge post-infarction aneurysm (arrows).

in such patients by the contraction of the right ventricle squeezing the flabby, thin-walled left ventricle against the clot-filled mass of the aneurysm (as one might squeeze a balloon against a wall). The removal of the mechanical support of the aneurysm in such circumstances can lead to irreversible circulatory collapse.

From the foregoing it is evident that an "ideal" case for resection is an aneurysm that is neither too small nor too large. The operation itself is relatively simple and should be done by the open technique. We have operated on 18 such patients—the oldest 72 and the youngest 5 years old.¹⁷⁻¹⁹ Six died during the operation or in the immediate postoperative period, and two were lost later because of the progression of coronary artery disease. Ten of the patients are still alive and well.

F. Dilation of the left ventricle

Extreme dilation of the left ventricle may occur as a consequence rather than a complication of coronary arteriosclerosis. However, it was recognized long ago that such a sacciform, thin-walled chamber cannot function as effectively as a normal sized ventricle. Only recently it has been recommended that a portion of such ventricles be excised and "tailed down" to normal size.*

*Schimert G: Personal communication.



Fig. 13. Operative photograph of a large post-infarction aneurysm of the left ventricle before (A) and after (B) resection. The edges of the ventriculotomy incision are sutured over strips of Teflon felt.

Although the first reports in this respect are encouraging, no definite opinion has been formed with regard to the definite value of this procedure.

G. Perforation of the ventricular septum

Post-infarction perforation of the ventricular septum is a septal defect which is relatively rare but generally fatal. There had been a total of 40 reported cases of attempted closure of post-infarction septal defects with a survival rate of 60% at the end of the first two months. This compares favorably with the 19% survival rate in the untreated cases, which certainly indicates that this condition requires timely and energetic surgical treatment.²⁰

The earlier reports²¹⁻²³ emphasized that surgical repair should be delayed two to three months to allow necrotic tissue around the edges of the defect to become fibrous and be able to hold sutures satisfactorily. With the increased experience, it has become obvious that repair can be successfully accomplished earlier than that. The importance of this observation is more evident if we con-

sider that the mortality in the untreated cases is 24% on the first day after rupture and 65% within the first week.²⁴ The major technical problem—namely, the friability of the infarcted septum—could be readily overcome by bringing a portion of sutures out anteriorly through the ventricular wall and tying them over Teflon buttresses. This method was used in one out of the four patients we have operated on. In two patients we applied circular patches of Teflon felt. The fourth patient required not only closure of the septal perforation but also resection of a large ventricular aneurysm. All four patients are alive and well now six years, three years, two years, and one year after surgery respectively.²⁵

In our opinion, post-infarction septal perforations should be surgically corrected when they are diagnosed.

Conclusions

Different forms and different stages of coronary heart disease present different surgical problems. Some of these problems appear to have a satisfactory solution, others

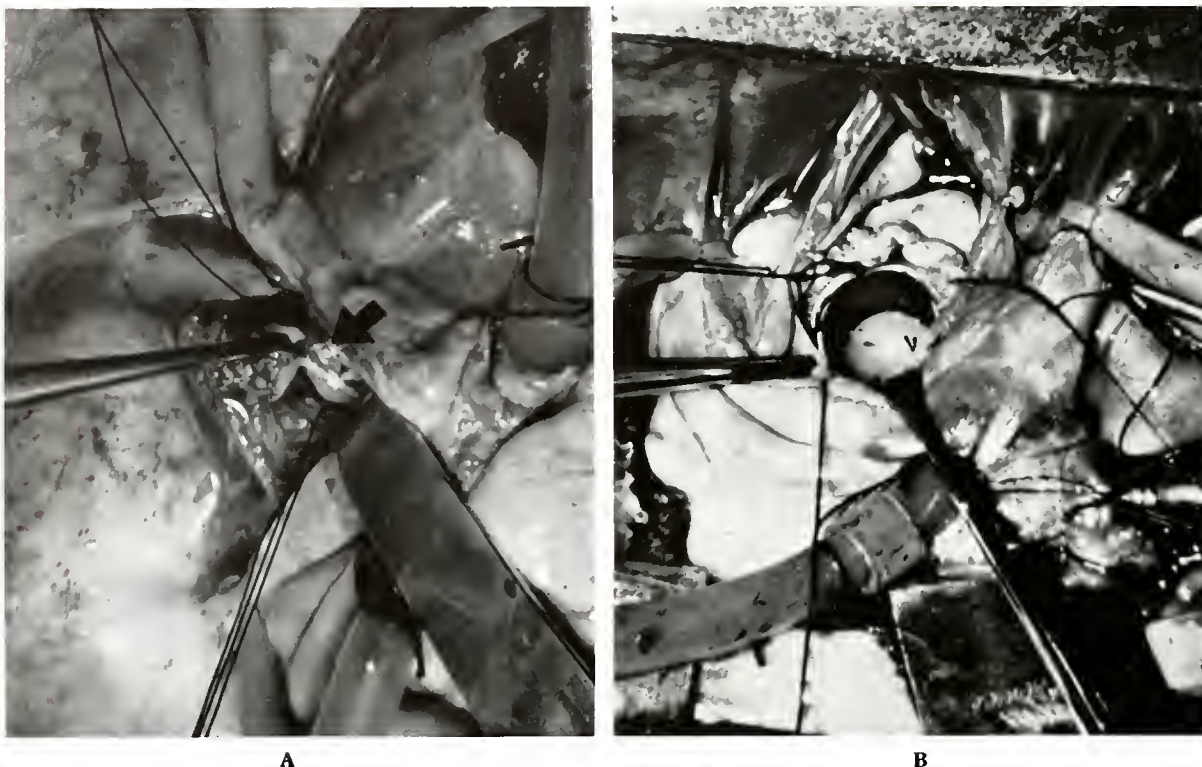


Fig. 14. Operative photographs of a patient with post-infarction rupture of a papillary muscle before (A) and after (B) resection and prosthetic replacement of the mitral valve. On picture (A) the ruptured papillary muscle (arrow) which has fallen back into the left atrium is raised with a forcep. On picture (B) the arrow points at the ball-valve prosthesis.

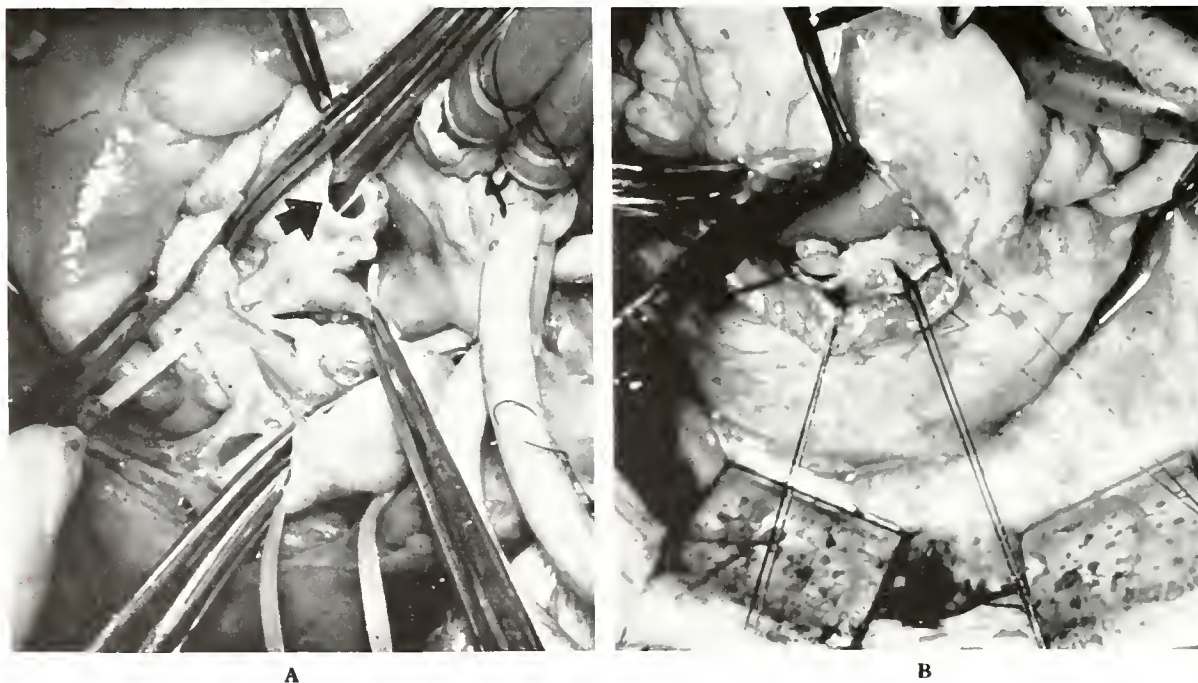


Fig. 15. Operative photograph of a patient with post-infarction perforation of the interventricular septum. On picture (A) the arrow points at the septal defect. On picture (B) the septal perforation is being closed with a Dacron-cloth prosthesis.

are still controversial, and a number of them are unsolved.

1. It is now generally accepted that the clinical evaluation of the coronary patient is not complete unless it includes coronary cineangiographic studies. These studies are especially important if the diagnosis is uncertain or surgery is contemplated.

2. Congenital anomalies of the coronary arterial system can be diagnosed easily and treated successfully if the investigator considers the possibility of their occurrence.

3. The clinical value of different procedures designed to revascularize the ischemic myocardium is dubious. Some of the procedures—such as pericardial poudrage and omental wrapping—are clearly obsolete. The Vineberg operation, having proved to hold clinical value, also has several disadvantages: the benefits are delayed and the amount of blood delivered is variable. The introduction of "direct" procedures for myocardial revascularization appears to be a major breakthrough, since there is both clinical and arteriographic evidence that they indeed create a major collateral pathway to the myocardium deprived of its natural blood supply. Their application certainly appears to be justified for the treatment of medically intractable angina and/or impending myocardial infarction.

Surgeons have pioneered in cardiac resuscitation, and they should maintain their interest in this subject. "Closed chest" methods should be used in the majority of cases; however, if the patient's condition appears to deteriorate but is still not utterly hopeless, open heart massage should certainly be considered.

5. The application of electric pacing transformed the previously grim prognosis of post-infarction heartblock into a much more hopeful one. Temporary brady-arrhythmias should be handled by temporary pacing; intermittent or permanent atrioventricular dissociation warrants the implantation of a permanent transvenous pacemaker device.

6. The introduction of the Fogarthy catheter into the surgical armamentarium made

embolectomy feasible, easy, and relatively safe—even in the patient with a history of recent myocardial infarction.

7. While the majority of patients with post-infarction functional disorders of the myocardium and the mitral valve (pseudoaneurysm, papillary muscle dysfunction, dilation of the mitral annulus) should be treated conservatively, most cases of ventricular aneurysm and all patients with rupture of the papillary muscle or chordae tendine and perforation of the ventricular septum require surgical management.

Operative treatment of coronary arterial disease is a new branch of surgery, and it is definitely here to stay. It is certainly not going to replace, but will serve as an adjunct to, prevention and medical management.

Acknowledgement

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Hand Trauma

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The purpose of this brief report is to outline some of the principles used in the management of trauma to the hand which are important at the outset and important in terms of achieving the best possible result. Injuries to the hands are extremely common and will continue to increase in numbers and types because of the continuing mechanization in our environment and the availability of devices which may cause injury to the individual who employs them.

Initial Assessment and Treatment

A cardinal principle in the management of hand injuries, as it is in other areas, is that the initial surgical first-aid or treat-

ment must be carefully planned so that it may become definitive if possible, yet must not militate against proper later reconstruction if that is required. The physician who assumes the responsibility for the treatment of these injuries must have a thorough knowledge of the anatomy of the hand in order to make a correct diagnosis and to make certain that other structures are not damaged in the effort to assess and treat the injury. He must understand the general principles of wound healing, but must also have special knowledge of the particular problems involved with healing of skin, tendon, bone, nerve, and vascular tissues. The surgeon must have a concept of trauma in association with or leading to infection, because of the special effects which often ensue with infection of the hand. Finally, and of extreme importance, the physician must not only have a concept of the prime role of the hand and its use by the patient, but he must fully understand the relative functional

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importance of the many parts of the hand.

In general, the objective in the initial treatment of any hand injury must be to achieve early and effective wound closure. The combination of immobility and edema secondary to wounds that do not heal over a prolonged period must be avoided. The only unequivocal indication for amputation of a portion of the injured hand is absence of blood supply. Therefore, each injured area must be examined carefully for parts usable not only for restoration of the area in its own right, but also for its contribution to functional salvage of other elements of the hand either initially or at later reconstructive surgery.¹

After an accurate diagnosis of the injury has been made, a knowledge of the hand in detail is required so that incisions made for exploration or restoration of structures do not further damage the already injured hand. If primary restoration cannot be effected safely with reasonable assurance of success, the concept of early healing must be constantly employed and definitive repair carried out later, when the hand is in the proper condition for this type of treatment.

Particular attention must be paid to the special structures of the hand—that is, tendon, bone, nerves, and vascular channels—since the healing processes in these structures are such that simple anatomic reapproximation is often either inadequate or in fact detrimental. For example, paratenon must not be removed or further injured since coverage of the area will then require composite tissue rather than simple, free split-thickness skin graft. Further, injury to this reactive tissue will create scarring that may impede the motion of tendons in that area, and possibly interfere with the healing of adjacent nerve or vascular repairs. Soft tissues must not impinge between fracture fragments, and yet must be removed from those sites without further injury to them.

It is frequently safer to leave certain structures unrepaired at the time of primary treatment. This must be the case when either anatomic sorting out of the parts

leaves the surgeon unsure about their identity, or when he is uncertain as to which structures should be repaired in preference to others at that time. It is therefore important to reiterate the concept that the physician must have an immediately applicable knowledge of the various priorities based upon function, site of injury, and type of tissue. Several excellent reviews of this subject are available and should be studied carefully.²⁻⁴

Management of Infection

Although there have been many significant advances in the treatment of infection, a considerable problem remains. Owing to the advent of modern antibiotic therapy and the increased emphasis on earlier reconstructive surgery, many excellent techniques may be applied. However, the challenge of preventing infection is a great one and constitutes a major obligation of the surgeon treating hand injuries. Antibiotics are useful, but improved treatment of apparently minor wounds, recognition of underlying conditions and peculiarities of individual patients, and aggressive treatment of previously established infections are necessary.

Again, accurate diagnosis is essential. The basic approach to any surgical infection, including complete drainage, bacteriologic diagnosis, and repeated assessment of the course of the infection, must be carried out. Persistent infection with resulting destruction of tendon sheaths and soft tissue and the production of edema in association with pain and immobility of the hand will impede therapy and remove the possibility of restorative surgery.

As indicated earlier, the anatomy of the hand must be borne clearly in mind, since the synovial and paratendinous spaces in the hand are complex yet consistent enough in their disposition to make effective incision and drainage possible. Often apparently minor wounds can not only lead to infection and destruction of local tissues, but also serve to jeopardize the patient's general condition. This is particularly true with injuries such as human bites or lacerations

caused by contact with teeth. The history here is important, so that these lacerations are not casually closed as the sole treatment. Because of the virulence of mixed infections such as these injuries cause, culture data, extensive cleansing and debridement, immobilization, and appropriate antibiotic therapy must be included in the therapeutic regimen.

Dressings

Surgical dressing of the hands is a critical aspect of the treatment of hand trauma. Dressings must, in every instance, be designed for a specific function and not just to "cover the wound." Dressings must be occlusive but not constrictive; they must maintain the degree of surgical asepsis present at the completion of the operative procedure; they must support structures efficiently and continuously until the need for change arises; and they must be removed and/or replaced whenever these criteria are not being met satisfactorily.

Summary

In a presentation of this sort, it is not possible to review completely all the types of injuries, infections, methods of specific treatment, and types of reconstructive procedures that may be applied to the multitude of hand injuries. Only a few specific examples have been mentioned. However, it is possible to emphasize the basic issues facing us with any sort of abnormal condition which requires management.

A complete knowledge of normal function and anatomy, accurate diagnosis, a determination not to add to the problem by attempting a too definitive attack without first accounting for the basic physiologic and reparative requirements of the wound, and a constant appreciation and critical view of the priorities of parts of the hand—all these are of paramount importance.

As with all types of surgery, the initial assessment and early treatment of a clinical problem will, more than any other single event in the course of treatment, determine the final result. If this early treatment is based upon sound physiologic principles, attention to detail, accuracy in diagnosis, and a view toward the goal to be achieved, restoration of function can result. Failing these things, the patient may be destined to lose time, income, confidence, and the ability to participate effectively within his environment.

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But nothing is of so great importance in the asthma as pure and moderately warm air. Asthmatic people can seldom bear either the close heavy air of a large town, or the sharp, keen atmosphere of a bleak hilly country; a medium therefore between these is to be chosen. The air near a large town is often better than at a distance, provided the patient be removed so far as not to be affected by the smoke. Some asthmatic patients breathe easier in town than in the country; but this is seldom the case, especially in towns where much coal is burnt. Almost all that can be done by medicine in this disease (asthma), is to relieve the patient when seized with a violent fit. This, indeed, requires the greatest expedition, as the disease often proves suddenly fatal.—William Buchan: *Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc.*, Philadelphia, Richard Folwell, 1799, p. 287.

Abdominal Pregnancy

Report of a Case

DAVID B. CROSLAND, M.D.

Abdominal pregnancy is a rare entity¹ that was first described more than one thousand years ago. The majority of abdominal pregnancies are secondary. The initial focus of nidation and placentation is the oviduct, with subsequent trophoblastic invasion of the peritoneal surfaces. This usually follows tubal rupture or partial tubal abortion. In any given population, the true incidence of abdominal pregnancy is more closely related to the incidence of tubal pregnancy than to the number of live births. Primary abdominal pregnancy resulting from the initial implantation of the fertilized ovum upon the peritoneal surface is very rare and would fit only a very few of the cases reported.²

Case Report

A 44-year-old, nonwhite married woman, para 0-0-2-0, was admitted to the Labor Room of Cabarrus Memorial Hospital with signs of early labor at approximately 37 weeks' gestation. She had been observed in the Cabarrus County Health Department Obstetrics and Gynecology Clinic since the twenty-fourth week of gestation. At that time it was difficult to outline the uterus, and no fetal heart was audible. Roentgenograms, both lateral and flat films of the abdomen, at that time revealed a single fetus with a questionable loss of tone and no signs of viability. The films were very poor, however. The patient was subsequently seen on four occasions, and at no time was a fetal heart audible. However, she reported feeling fetal movements. Clotting studies done during the prenatal course were normal. Otherwise, the patient's prenatal course was uneventful except for marked obesity.

The physical examination on admission to

the hospital revealed an extremely obese, nonwhite woman in probable labor. The vital signs were normal. The abdomen was pendulous and the uterus appeared irritable and did not relax between contractions. No fetal heart sounds were audible and no fetal parts could be outlined. Pelvic examination revealed the cervix to be closed and thick, with no presenting part palpable. Results of laboratory studies, including a clot observation test, were normal. X-ray films revealed a fetus high in the abdomen, in a transverse position, but with no overlapping of the fetal bones. The films were not of the best quality because of the patient's marked obesity.

Hospital course

The patient was taken immediately to the operating room and a laparotomy was performed. Operative findings revealed an extrauterine pregnancy with the placenta attached to the right broad ligament. The fetus was palpable through thickened membranes high in the upper part of the abdomen, and was easily extracted.

The fetus was a viable, female infant weighing 7 pounds 1 ounce. It was in poor condition and survived only three hours. There was a 2-inch depression in the left side of the skull, but no obvious evidence of congenital anomalies. The cord was ligated close to the placenta with no attempt to extract the placenta. Massive hemorrhage from the large omental vessels occurred at the edges of the sac; the estimated blood loss was approximately 3,000 ml. The patient went into clinical shock and was given 2,000 ml of whole blood with good response. The edges of the sac were located and ligated with difficulty, thus controlling the hemorrhage. The patient's vital signs were stabilized and closure in the usual manner was performed using wire stay-sutures.

The patient aspirated immediately following surgery, and a portable chest x-ray

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showed scattered densities throughout both lung fields, consistent with bronchopneumonia. Her postoperative course was otherwise uneventful until the seventh day when evisceration occurred. She was immediately taken to the operating room where secondary closure of the abdomen was performed. The remainder of her hospital course was uneventful and she was discharged on the twentieth postoperative day.

Follow-up and second admission

Follow-up examination revealed the persistent presence of a large mass which remained so for 3½ years with few associated symptoms other than some vague and intermittent abdominal pain. At the end of this period the patient was found to have ventral hernia and underwent repair. At the same time a large intraperitoneal placental mass attached to the right broad ligament and the uterus was found and removed. The pathologic examination revealed placental tissue with hyalinization, organization, coagulation, necrosis, and calcification.

The patient's postoperative course was uneventful and she was discharged on the eighth postoperative day without symptoms. She was observed for seven weeks postoperatively, when a pelvic examination disclosed no abnormalities.

Discussion

With the advent of antibiotic therapy for pelvic inflammatory disease, ectopic gestations have increased to the point that they comprise approximately 1% of all pregnancies. Since about 1% of all ectopic gestations reach term or near term, the number of advanced extrauterine pregnancies might be expected to increase also.³ Barnette and Bolen,⁴ and Beacham and colleagues⁵ reported the proportion of abdominal pregnancies to all deliveries as 1:3,244 and 1:3,166 respectively. Clark and Guy⁶ recorded a ratio of 1:2075.

The fetal mortality associated with these cases is variable but probably very high. The consensus in the literature is that an infant has about a 25% chance of surviving and a 10% chance of being normal. The in-

cidence of congenital anomalies has been placed as high as 50%.

The overall maternal mortality is in the range of 10%. Fetal hemorrhage is seldom spontaneous and usually occurs after manipulation at surgery.

Diagnosis

The diagnosis depends on recognizing that the patient is pregnant and then establishing the fact that the pregnancy is extrauterine. A high index of suspicion is therefore mandatory. The diagnosis should be considered whenever bizarre circumstances are encountered. Making the diagnosis as early as possible is very important because of the risk of catastrophic hemorrhage following placental separation, which can occur spontaneously. In about half of the cases of abdominal pregnancy, there is low abdominal pain and/or vaginal bleeding, which is usually noted approximately six weeks following the last menstrual period. Afterward there is usually a quiescent stage before symptoms occur, and then most patients complain of abdominal pain ranging from discomfort associated with fetal movements to marked intermittent colicky pain associated with gastrointestinal disturbances. There is occasionally a suggestion of partial bowel obstruction.

The physical signs ascribed to abdominal pregnancy are often absent or not easily recognizable. Some of these signs are the easily palpable superficial fetal parts, inability to palpate the round ligaments, and unusually loud fetal heart tones. The physical signs most often recorded are identification of a pelvic mass separate from the fetal mass, abnormal fetal lie with presenting part high above the pelvic inlet, and displacement of the cervix, the latter being present in 15% of the cases. An additional finding reported by Dixon and Stewart⁷ is a maternal vascular souffle distinctly louder than a normal uterine souffle and usually localized to a small area on the maternal abdomen just medial to the iliac spine. Presumably this souffle is caused by the ovarian vessels supplying the placental site.

Laboratory findings do not play a promi-

nent role in establishing the diagnosis. One of the greatest aids, however, is x-ray examination, the most useful view being a lateral upright film of the abdomen. Visualization of the fetal skull behind the anterior margin of the maternal spine is a pathognomonic sign of abdominal pregnancy. On the anteroposterior view, loops of bowel may be shown to be intimately associated with the fetus.

Two excellent reviews of the radiographic findings in abdominal pregnancy are recorded by Todes⁸ and Weinberg et al.⁹ The eight radiologic signs usually present are: (1) absence of a uterine shadow, probably the most reliable sign; (2) bizarre shape of the fetal head; (3) pocket of gas very near the fetal head; (4) extension or strange position of the fetal limbs due to unusual mobility of the fetus; (5) an unusually high position of the fetus in the abdomen and in a transverse position which remains constant; (6) fetal parts visualized immediately beneath the abdominal wall in the lateral view; (7) an abnormally thin soft-tissue covering of the fetus due to the presence of the amniotic sac rather than the uterus; and (8) unusual clarity of the fetal parts and maternal intestinal gaseous shadows, overlying and intermingling with the fetal parts.

Other methods of diagnosis such as hystero-graphy, radionuclide scanning,¹⁰ aortography or pelvic angiography¹¹ are more rarely used but can be very helpful.

Management

Once the diagnosis of abdominal pregnancy is established, immediate intervention is the best rule. There is rarely any good reason for waiting until the fetus reaches greater maturity. Some contend that delaying the operation after fetal death has occurred will allow for decreased placental vascularity and permit removal of the placenta in many cases. However, there is very little to support this view at the present time. Even weeks after fetal demise, fatal hemorrhage has occurred when attempts were made to remove the placenta. Clark and Guy would remove the placenta if the implantation site and bed of the placenta could be removed with it. By far the safest thing

to do is to keep hands off the placenta and close the abdomen without drainage.

A review of the literature on the subject suggests that the postoperative morbidity is lower when the placenta can be removed as a part of the primary surgical procedure.¹² If the placenta is left in situ, complications may be produced such as abscess, bowel obstruction, prolonged febrile reaction and even a possible need for later surgery. Hreshchyshyn et al.¹² have suggested and used Methotrexate as an agent to hasten absorption of the placenta left in situ. This may well reduce postoperative morbidity.¹³ Recently, Weinberg and Pauerstein¹⁴ question the usefulness of Methotrexate on a mature placenta.

Summary and Conclusions

A case of abdominal pregnancy is presented. The diagnosis and management are discussed in detail.

Abdominal pregnancy is a surgical emergency, and when it is diagnosed laparotomy and removal of the fetus should be performed immediately. Handling the placenta at the time of operation is a matter for argument, but the safest approach is not to manipulate this vascular organ as fatal hemorrhage can occur.

With the advent of antibiotics, it is reasonable to expect more advanced extrauterine pregnancies, and the physician should be ever on the alert for signs and symptoms of this entity.

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What About Our Society?

JOHN R. GAMBLE, JR., M.D.

Only 50.7% of U. S. physicians were members of the AMA in 1968, and the graph points downward! So, who is to speak for the majority of the physicians in the years ahead?

There is no difficulty in finding within our state societies the same sort of discontent that affects AMA membership. North Carolina physicians are not reticent in stating their candid opinions about the ineffectiveness of our State Society in relating to or helping in their practice of medicine. When one poses the question, "What does the State Society do for you?" the usual response is about the insurance program it offers. Seldom does the response go beyond this, even after time for thought. There seems little doubt that the dues one pays beyond the local society level would more than cancel any savings on insurance which the State Society offers. Can our Medical Society keep its membership and attract new members unless it changes its direction and relates better to the physicians in it? However, we will all need to do more than complain. We need to offer ourselves for involvement and make ourselves heard.

To provoke discussion and involvement I would like to present some of my ideas.

Suggestions for Increasing Member Participation

Organizational changes

Perhaps we should start with a complete overhaul of the top leadership concept of the State Society. The leadership, it seems to me, should be elected by the entire member-

ship. What is the best way to accomplish these changes? I suggest a triumvirate in the leadership position, formed by dividing the state into three equal physician-population areas—Eastern, Middle, and Western—with one representative elected from each district

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for a three-year term. The terms of the three representatives would be staggered so that only one would retire each year. The person serving his third year on the triumvirate would serve as the president of the State Medical Society.

By campaigning for this office, the candidate would be in close contact with the physicians in his district. This would allow each of the officers of the triumvirate to visit and maintain active communication with each county society in his district. Also, a person serving three years would be able to initiate and see through programs to which he was dedicated. A one-year term does not provide this opportunity.

Another change in the society's structure which might provide more participation would be to limit the term of delegates to eight consecutive years. The same rule should apply to other offices, elective or appointive, within the Society.

Communication

More participation could also evolve from allowing any member the privilege of personally presenting a subject to the appropriate committee or, in the absence of such a committee, to the Executive Council. To insure this privilege, the *North Carolina Medical Journal* or the monthly newsletter

should publish one month prior to the meeting of each committee the date, time, and place of meeting, together with the name of the person to contact in order to appear at the meeting. If a physician feels that the committee has not given his subject adequate consideration, he should be entitled by the by-laws to present it personally at the next meeting of the House of Delegates.

Reports of all committees, the Executive Council, and the House of Delegate meetings should be published in the *North Carolina Medical Journal* the month subsequent to each meeting.

The proposed budget of the Medical Society of the State of North Carolina should be published one month prior to its adoption by the House of Delegates before the beginning of each fiscal year. The audit of the Society should be published within four months after the close of the fiscal year. The Transactions of the Society published in May, 1970 lists the audit for the fiscal year January 1, 1968 to December 31, 1968—16 months after the close of that fiscal year. No audit for the year 1969 appears. The proposed budget for 1970 appears for the first time in May, 1970. The Finance Committee makes no comment or recommendations on the audit or the proposed budget.

The State Medical Society publishes a monthly newsletter which could provide an excellent medium to seek opinions by questionnaire on state society policy and direction.

The Annual Scientific Sessions

The scientific program offered at the Annual Meeting of our State Society is not attractive to the majority of North Carolina physicians. This seems inexcusable in view of the fact that local societies and hospitals throughout the state offer outstanding two-day programs that attract physicians from a large area, including visitors from outside the state. It seems that the educational program should at least equal the attraction of the social program.

The Roster

For some years the physicians of this

state have paid ten dollars (\$10) every two years to be registered by the Board of Medical Examiners. This is justified by them on a need-for-information basis. The only visible result of the fee is a roster published every two years while the Medical Society is publishing a yearly roster. Apparently both publications go to essentially the same people, and experience has shown that the practicing physician usually refers to the yearly publication. Why not have both organizations jointly publish the yearly roster? In the alphabetical list of names in this roster the members of the State Society could be indicated by an asterisk before the name. In this same section the names of persons who were not members of the society would be updated every other year. The listing of physicians by counties would be continued as in the present Society Roster.

Facing the Challenges of the Seventies

Major challenges facing North Carolina physicians in the 1970s are personnel shortages in the medical and para-medical fields, the overload of the physician by paper work, consumer protection in the medical field, and top public health priorities such as pollution, population control, and hunger.

Shortage of physicians

The United States was estimated to be short 52,000 physicians in 1969,² while 50% of the qualified applicants are unable to get into medical school.³ The main problem is the shortage of "practicing physicians." A number of innovative methods are being used in an effort to increase the supply. Ohio State University has begun a three-year curriculum; the University of New Mexico plans to recruit students from rural areas; Miami University Medical School has Florida State legislative support based on recruitment of students from geographical areas of the state.

One cannot help but believe that if medical school applicants can be screened on the basis of academic standing, age, race, sex, and residence, they could also be screened on the basis of their primary interest in medicine, and their interest in entering a

particular area of service after graduation. Such a policy could result in student bodies heavily weighted in favor of future practicing physicians. Recently a physician's son who is a student in an Ivy League medical school told me that it was general information that 25% of the students were in medical schools to avoid the draft.

At present the status of a part of the change in medicine in North Carolina is summarized in the following quotation:

"The report of the Legislative Research Commission on its study of the physician shortage included a number of recommendations which were acted upon. Recognizing the critical need for more health manpower input, resolutions were passed which (a) urged the Boards of Education and Higher Education actively to pursue the strengthening of science and other facets of premedical education in schools (Res. 103, S 200), (b) asked the medical societies, guidance counselors, and others to promote interest in medical careers (Res. 43, S 198), (c) requested all three medical schools to increase their output of practicing physicians by increasing the classes, accelerating the educational process, and orienting medical education toward practice (Res. 104, S 199), and (d) directed the 1969-71 Legislative Research Commission to make a broad study of health manpower supply and distribution problems and potential solutions, including changes in the health care system (Res. 55, H 306).

The focus on medical schools brought about two other important developments. There was a special appropriation (Ch. 1273, H 653) for grants to the Duke and Bowman Gray Medical Schools based on \$2500 for each North Carolina student, provided that the school increases the number of entering North Carolina students each year. A stated purpose of that act is to encourage the schools to orient students toward personal health care in the state and to foster family and community medicine, but the grant is tied only to the residency factor. Another special appropriation of \$375,000 (Ch. 1189, H 1199) is to be used for planning and developing a two-year curriculum for a medical school at East Carolina University; this act revived the 1965 legislation (G.S. 116-46.4) authorizing a medical school upon certain conditions which had not been met."

Paperwork

In 1970 the Lincoln County Medical Society presented a resolution to the Medical Society of the State of North Carolina requesting a state-wide study of the means for simplifying and/or reducing the amount of paperwork (accident and health forms

concerning histories and disabilities, and fee claims for services) required of physicians. This resolution was turned down by the House of Delegates on the grounds that it was impractical. Nevertheless, one continues to see an occasional short simplified claim or disability form. Also, one continues to read and hear of instances where local societies, clinical groups, and hospitals have developed succinct forms that are satisfactory to the insurance company and the physician. The forms we use currently make excessive demands on the physician and create unduly large amounts of information which may be used to the disadvantage of the patients we serve. One has only to examine the short form developed by the Los Angeles County (California) Medical Association to see what is sufficient. It seems that all health insurance companies could adopt the practice of providing a credit card containing all the information now given on a Blue Cross card. The doctors and the hospitals (particularly in the emergency rooms) are the losers so long as action on this problem is put off.

The consumer's interest

The medical profession must protect, as far as possible, the consumer's interests in the area of health insurance. The public is not knowledgeable in this field, and we owe them this interest. One of the most obvious areas wherein they lack protection is the apparently flagrant use of medical waivers in policies. At present insurance companies place restricting waivers on body systems for little or no reason, if the patient has a history of any disorder affecting that system. He receives no reduction in cost on this account, and no instructions as to when and how these restrictions may be lifted. It is obvious that the insurance companies continue to receive a portion of their premiums which they know that they will never be called on to pay.

The Medical Society through its own insurance committee, together with the North Carolina Hospital Association, should pursue corrective action vigorously with the insurance companies and the North Carolina Insurance Commission. If necessary, some

form of legal action or legislation should be instituted, but surely if this matter were presented to the public, the insurance companies would recognize that corrective action should be taken by them.

With regard to consumer protection the State Society should encourage more outpatient care coverage to prevent unnecessary hospitalization and to lower medical costs to the public. In group hospitalization plans, it would seem to be to an employee's benefit to be offered the choice of additional coverage at his own expense rather than having to purchase a second policy.

Not only do insurance companies need to be policed or improved, but we ourselves do. Rather than have our linen washed in public and help the Hart Committee, I think we should have an active program whereby we attempt to identify and rehabilitate the so-called "bad apple" in our profession. Should not the State Society prepare a questionnaire for a physician's own self-analysis (and later use as guidelines for the local and state societies) listing specific questions dealing with unethical or borderline practices?

Public health problems

In the public health issues such as pollution, population control, and hunger or malnutrition, the Medical Society of the State of North Carolina and the AMA have allowed the politicians to provide whatever leadership has been furnished. It seems that physicians should be the natural leaders in

these areas. To make this a reality, the Medical Society committees dealing with these subjects will have to develop bold, innovative, and practical programs and present them to the physicians and the public through a well-developed public relations program.

To get the political attention necessary to carry out these programs, it seems that the Medical Society would profit most from its Medpac money if it used it first to encourage and support political candidates from the medical profession. The general public recognizes the need for physician participation in the decisions made by government in the medical field.

Conclusion

Hopefully, this article will accomplish its purpose of stimulating physicians to become more active in the formation of ideas, programs, and activities of the Medical Society of the State of North Carolina. An active state medical society should make for a more active AMA, thereby increasing its membership and effectiveness and its ability to speak for a majority of physicians.

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The usual forerunners of an apoplexy are giddiness, pain and swimming of the head; loss of memory; drowsiness; noise in the ears; the night-mare, a spontaneous flux of tears, and laborious respiration. When persons of an apoplectic make observe these symptoms, they have reason to fear the approach of a fit, and should endeavour to prevent it by bleeding, a slender diet, and opening medicines.—William Buchan: *Domestic Medicines, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines*, etc., Philadelphia, Richard Fclwell, 1799, p. 289.

TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES: NORTH CAROLINA
JULY 1970 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE				NONWHITE				COUNTY	WHITE				NONWHITE					
	Perinatal Deaths		Total Deliveries Aug. 1969 - July 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries Aug. 1969 - July 1970	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries Aug. 1969 - July 1970	Perinatal Rate Per 1,000 Deliveries						
	July 1970	August 1969- July 1970			July 1970	August 1969- July 1970				July 1970	August 1969- July 1970								
NORTH CAROLINA	175	2,000	448,266	4.4	174	1,371	286,773	4.4											
ALAMANCE	3	33	13,5	26.3	4	40	44.8	44.8	PERLIN	1	-	1.1	41.7	1	-	1.0	-	-	
ALEXANDER	2	17	351	48.4	1	1	3.5	-	PERQUIMAN	-	-	82	-	3	4	3.5	-	-	
ALLEGHANY	-	3	129	-	-	-	4	-	PERSIMMON	1	4	298	30.0	14	27	38.0	-	-	
ANSON	3	152	-	-	3	24	27.8	86.7	PITT	1	24	757	31.7	4	3	4.0	-	-	
ASHE	1	10	326	30.7	-	-	-	-	ROBE	4	5	111	45.1	-	-	-	-	-	
AVERY	-	8	196	30.6	-	-	2	-	ROCKFORD	4	35	1264	27.7	-	-	137	-	-	
BEAUFORT	1	1	398	25.1	1	13	26.7	48.7	ROCKWELL	2	27	500	54.0	4	14	31.4	67.0	-	
BERTIE	-	6	114	52.6	1	12	24.3	47.4	ROSELAND	1	27	375	44.0	-	-	144	33.0	-	
BLADEN	2	5	258	19.4	10	10	17	48.1	ROCKWELL	7	33	946	37.1	4	23	27.7	48.0	-	
BRUNSWICK	1	10	285	35.1	1	4	15.7	-	ROSELAND	1	29	1175	24.7	1	14	14.4	46.4	-	
BUNCOMBE	6	60	2141	28.1	1	40	28.4	70.1	RITCHIEFORD	5	25	775	32.4	-	-	146	41.1	-	
BURKE	4	31	924	33.4	1	3	8.7	-	SAMPSON	8	40	18.6	-	2	14	31.5	60.3	-	
CARRAS	2	25	104	23.7	1	12	24.4	40.8	SCOTLAND	12	315	28.1	-	2	17	20.7	40.1	-	
CATAWBA	3	39	1129	34.5	5	107	48.3	-	STANLEY	1	15	279	53.9	-	-	127	-	-	
CAYDEN	-	2	54	-	1	1	3.1	-	STORES	1	10	362	27.6	-	-	92	-	-	
CARTERET	1	19	563	37.8	-	3	45	-	TORRY	1	31	489	34.9	-	-	74	-	-	
CASWELL	-	2	141	-	1	17	82.8	-	TYNAR	-	-	89	-	-	-	-	-	-	
CATAWBA	5	51	1553	32.8	9	234	38.5	-	TRANSYLVANIA	1	13	304	42.9	-	-	47	-	-	
CHAPEL HILL	5	331	10.1	10.1	2	10	18.0	55.6	TYNAR	1	1	40	-	-	-	24	-	-	
CHESTER	8	261	28.8	-	2	15	-	-	UNION	3	24	734	29.8	-	1	31	37.7	-	
CHOCOMA	1	108	-	-	3	1.5	-	-	VANCE	2	3	374	-	14	24	40.4	-	-	
CLAY	-	8	83	-	-	1	-	-	VALE	5	60	3084	18.5	4	52	11.6	40.6	-	
CLEVELAND	4	27	1013	26.6	2	24	44.0	84.0	VANREN	2	4	55	-	-	-	137	41.0	-	
COLUMBUS	14	55	27.7	-	1	18	31.7	67.7	WASHINGTON	1	1	142	-	-	-	137	43.8	-	
CRAWEN	33	1194	27.6	-	2	14	38.4	26.4	WATAUGA	1	12	346	30.1	-	-	7	-	-	
CUMBERLAND	8	129	3776	28.9	-	65	13.4	48.9	WAYNE	6	37	1146	37.3	-	44	614	69.5	-	
CURRITUCK	-	-	59	-	-	1	6	-	WILKES	4	33	875	27.7	-	1	24	-	-	
DARE	3	100	-	-	-	-	-	-	WILSON	4	25	574	48.6	-	46	360	47.9	-	
DAVIDSON	1	45	1462	30.4	1	18	25.4	63.4	YADKIN	1	7	369	19.0	-	-	34	-	-	
DAVIE	-	5	263	17.7	-	-	65	-	YANCEY	3	6	194	30.9	-	-	3	-	-	
DUPLIN	1	11	402	27.4	1	13	2.7	42.7	CITIES										
DURHAM	3	41	1500	27.0	5	51	47.8	61.7	City totals are also included in county totals										
EDGEWATER	9	423	21.3	-	4	24	50.4	40.4	ALBEMARLE	2	1	129	-	1	40	-	-	-	
FORSYTH	3	87	2764	32.0	8	53	112.0	36.3	ASHEVILLE	1	16	687	23.2	17	130	71.4	-	-	
FRANKLIN	2	6	108	21.9	1	15	24.7	62.1	BURLINGTON	1	13	243	23.9	1	3	150	69.0	-	
GASTON	8	73	2648	28.0	1	25	51.7	48.0	CHAPEL HILL	2	7	331	21.1	1	4	61	-	-	
GATTS	2	1	14	-	2	7	4.7	-	CHARLOTTE	10	81	3190	26.4	6	64	206.7	47.6	-	
GRAHAM	4	10	-	-	-	-	-	-	CONCORD	1	7	223	37.4	-	-	117	40.7	-	
GRANVILLE	6	239	28.1	-	3	15	33.6	44.9	DURHAM	3	26	934	27.8	47	805	54.3	-	-	
GREENE	4	132	-	-	1	8	14.9	52.7	EDEN	3	6	232	26.9	1	3	53	-	-	
GUILFORD	10	14	3888	26.7	5	85	157.0	53.6	ELIZABETH CITY	2	142	-	-	-	-	107	-	-	
HALIFAX	1	11	375	29.2	-	32	59.3	-	FAYETTEVILLE	1	35	933	37.5	2	35	569	59.4	-	
HARRIS	1	2	50	4.0	3	16	34.1	46.9	FASTONIA	3	25	830	30.1	1	11	224	48.0	-	
HAYWOOD	4	34	645	46.5	-	-	10	-	GOLDSBORO	3	17	359	47.4	-	-	433	63.0	-	
HENDERSON	1	19	633	30.0	-	-	44	-	GREENSBORO	6	54	1699	28.4	3	59	925	59.5	-	
HERFORD	2	12	140	86.7	13	763	48.4	-	GREENVILLE	1	11	322	34.2	2	12	182	65.9	-	
HOF	1	4	23	-	3	44.5	-	-	HENDERSON	1	1	124	-	-	-	131	67.7	-	
HYDE	1	4	38	-	-	4.7	-	-	HICORY	2	19	363	52.3	2	4	109	-	-	
IRDELL	2	4	1011	29.7	2	15	36.0	42.9	HIGH POINT	2	18	817	22.0	1	24	498	50.4	-	
JACKSON	-	9	295	30.5	-	2	51	-	JACKSONVILLE	11	431	25.6	-	2	72	-	-	-	
JOHNSTON	1	25	756	33.1	3	20	34.4	58.0	KINSTON	1	9	283	31.8	-	10	244	43.7	-	
JONES	3	92	-	-	2	5	7.0	-	LENOIR	2	8	228	35.1	-	3	55	-	-	
LEE	1	9	419	21.5	-	15.7	-	-	LEXINGTON	1	10	266	37.6	-	6	88	-	-	
LENOIR	2	20	541	33.9	5	21	42.9	49.0	LUMBERTON	6	159	30.0	-	3	215	41.8	-	-	
LINCOLN	13	535	24.3	-	8	101	79.2	-	MONROE	4	129	-	-	2	40	-	-	-	
MCDOWELL	1	18	574	31.4	-	44	-	-	NEW BERN	6	163	36.6	-	1	114	40.2	-	-	
MCCONNELL	1	5	231	21.6	-	1	6	-	RALEIGH	2	30	1637	18.3	2	31	578	63.6	-	
MADISON	1	13	245	53.1	-	-	-	-	REIDSVILLE	1	3	180	-	-	1	101	49.5	-	
MARTIN	5	214	23.4	-	3	14	26.7	53.4	ROANAKE RAPIDS	1	7	169	41.4	-	4	30	-	-	
MCKENBURG	1	125	4936	25.3	10	171	238.9	42.8	ROCKY MOUNT E	3	122	26.7	-	1	11	109	64.7	-	
MITCHELL	6	209	28.7	-	-	1	-	-	ROCKY MOUNT N	1	7	253	-	-	3	97	-	-	
MONTGOMERY	1	9	255	35.3	1	10	12.7	83.3	SALISBURY	1	9	217	41.5	-	1	142	38.0	-	
MORRIS	3	29	481	60.0	1	15	24.1	62.5	SAYFORD	4	176	-	-	-	1	60	-	-	
NASH	1	13	612	21.2	3	28	57.0	50.9	SHELBY	5	187	28.7	-	1	7	133	57.6	-	
NEW HANOVER	4	25	1265	27.2	1	14	37.7	50.4	STATESVILLE	7	245	28.6	-	1	4	143	60.9	-	
NORTHAMPTON	-	1	99	-	2	9	26.9	31.1	THOMASVILLE	3	600	22.7	-	-	14	320	40.7	-	
ORANGE	1	51	2269	22.3	2	14	44.1	43.1	WILMINGTON	15	-	-	-	-	-	-	-	-	
PAULIC	8	25	647	29.5	2	2	22.3	40.4	WILSON	2	13	303	42.9	-	4	265	34.0	-	
PERQUIMAN	-	2	97	-	2	2	6.7	-	WINSTON SALEM	1	50	1403	35.6	-	7	49	107.7	45.5	-
ROCKWELL	7	285	24.6	-	3	17.7	-	-											

Perinatal Death Rate = fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life) / total live births + stillbirths of 20 weeks gestation or more x 1000

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

North Carolina Medical Journal

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under the direction of its Editorial Board.

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Founding Editor (1940-1963)

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OCTOBER, 1970

WHAT? WHEN? WHERE?

Beginning in November the Medical Society of the State of North Carolina will carry each month in its publication, *The North Carolina Medical Journal*, a new feature called "WHAT? WHEN? WHERE? in Continuing Education." Each issue will list these activities in three categories: (1) those for North Carolina in the month ahead, in some detail; (2) those for North Carolina in later months, in summary form; (3) those for contiguous states (Georgia, South Carolina, Tennessee, and Virginia), also in summary form.

This feature is planned to increase the awareness of North Carolina physicians and allied health personnel of the many opportunities for continuing medical education and to serve as a clearing house for those who are organizing such activities.

If you have events you would like listed, send the information to Ron W. Davis, Ed.D., Director of Continuing Education, Regional Medical Program, P. O. Box 8248, Durham, North Carolina 27704, or phone (919) 477-0461. Include the name of the activity, a printed program and/or a program description, name of sponsoring group, date(s), time(s) and place, eligibility (if restricted) and person to contact for further information. To be included in a specific issue, information is to be received at the above address by the fifteenth of the preceding month.

If you know of an activity which should be included in this column, we'd be glad to hear from you.

* * *

WHAT ABOUT OUR SOCIETY?

Dr. Gamble's paper of the above title, appearing in this issue, represents the authentic voice of a Society member who feels the need of getting some things done, together with frustration about the means of doing so. Lots of us can join him in this feeling, and not just on matters medical. However, our readers have to consider the degree to which the Society can be held responsible for the present difficulties of medical practice, and the degree to which we are caught up in trends of the times. Like the school busing issue, there are some things which seem to have gone completely out of our grasp, and in the case of medical issues, the profession has little leverage to use.

Commenting specifically on Dr. Gamble's paper might serve to help others achieve action on their requests. The House of Delegates ultimately makes the decisions on which Society policy is based, and they represent the membership in terms of free election to it. If a member is dissatisfied with the actions of a delegate, or (more commonly), the inaction of a delegate, he can

nominate someone else or stand for nomination himself. Dr. Shaffner's presidential acceptance speech, in the July 1970 *Journal*, speaks to these points.

Any member who wants to get the ear of a committee can do so at the Fall Committee Conclave in person, or can write at any time. The list of committee appointments appears in the July *Journal* and will appear again in the annual edition of the Roster. Anyone who has ever attended such meetings, or the meetings of the executive council, knows that full hearing is given everything, even matters which seem quite trivial to some of us. A resume of the major actions of the executive council appears shortly thereafter in the *Journal*, and county society officers and delegates get transcripts of the meetings shortly after they are concluded, for the use of any member. The expense of making a copy of the stenographic report of these meetings for every member would be prohibitive.

The key phrase to express a major difficulty with the Society is lack of involvement by members. The Society has the mechanisms for doing things. It carries on programs going far beyond any insurance scheme, and reports concerning these programs appear at length in the Transactions, in capsule form in the editorials and newsletter, and are often the subject of papers in the *Journal*. There is no reason for any member who reads Society publications to think that insurance is its major function; it is closer to a minor function. All of us are more impressed by the presence of something we don't like than we are by absence of something we don't like. If individual physicians had to scurry around and provide representation on the State Board of Health, on highway safety, on various federal programs, on medical care for military dependents, and so on, there would soon be a hue and cry for central representation. We already have it; let's make it work by participation, beginning by informed insight into the relatively simple way in which the Society is organized.

Bulletin Board

COMING MEETINGS

North Carolina Meeting of the American College of Physicians, 39th Annual Meeting, and the North Carolina Society of Internal Medicine, 16th Annual Meeting: Scientific Session on Infectious Diseases—Holiday Inn, Raleigh, November 12-14.

North Carolina Chapter of the American Academy of Pediatrics and the North Carolina Pediatric Society—The Carolina, Pinehurst, November 13-14.

Mid-Crescent Comprehensive Health Planning Conference: Lecture on Pulmonary Disorders—Rowan Technical Institute, Salisbury, November 18.

NEW MEMBERS OF THE STATE SOCIETY

Alexander Clovis Hattaway, III, M.D., 1300 St. Mary's St., Raleigh 27605

Paul A. Walters, Jr., M.D., Anes, 3515-A Beacon Hill, Winston-Salem 27106

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H. Rankin Miller, M.D., P. O. Box 200, Pisgah Forest
Gene Thornton Blakely, M.D., S. 720 Fleming St., Suite H, Hendersonville 28739

Paul Borradaile Savory, M.D., R. 4A2 Doctors Pk., Asheville 28801

Harold Francis Hamit, M.D., S. 1309 Providence Rd., Charlotte 28207

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William Garrison Porter, M.D., I, 1900 Brunswick Ave., Charlotte 28207

James Frosst Alexander, M.D., I, 4106 Melchor Ave., Charlotte

Oliver Fennell Roddey, Jr., M.D., 2124 Sherwood Ave., Charlotte

Paul Perkins Gwyn, Jr., M.D., 751 Bethesda Road, Winston-Salem

Wilson Locke Lynch, M.D., GP, Pamlico Med. Ctr., Bayboro 28515

William Travis Weathers, M.D., 1700 Abbey Place, Charlotte 28209

Delmar Howard Knudson, M.D., Dept. of Rad., Box 3808, Duke Univ. Med. Center, Durham 27706

Emil H. Henning, Jr., M.D., 6 Broad Street, Sylva, 28779

Charles Hall Ashford, Jr., M.D., S. 605 Pollock St., New Bern 28560

Daniel Elmer Brown, M.D., 3306 Alamance Dr., Raleigh 27609

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

Dr. Jean D. Acton, assistant professor of microbiology at the Bowman Gray School of Medicine, is the recipient of a Research Career Development Award from the National Institutes of Health.

The award, renewable each year for a five-year period, will enable her to further develop her research on the effect of air pollutants on phagocytic cells in the lung. Her work involves studies on nitrogen dioxide, one of the many components of smog, and how it causes alterations in the function and/or structure of certain lung tissues.

She has found that if laboratory rabbits are injected with a harmless virus, certain cells begin to produce a substance, interferon, which induces resistance to more severe infections. However, if these rabbits are then exposed to high concentrations of nitrogen dioxide for short periods, the production of interferon stops and the cells lose their resistance. The doses of nitrogen dioxide used in these experiments are many times higher than that found in normal pollution.

Dr. Acton's research plans include studies on the effect of lesser doses of nitrogen dioxide, given over longer periods of exposure. She also hopes to find answers to these other questions:

—How do air pollutants affect the structure and function of cell membranes in the lung?

—What biochemical injury to lung cells is induced by pollutant gases?

—Do pollutants in the air lower the body's resistance to virus-caused cancer? If so, what mechanisms are involved?

* * *

Dr. H. O. Goodman, professor of genetics, is developing a test which soon could make it possible to tell a mother-to-be during the early weeks of her pregnancy whether her baby will be affected by any one of several genetic diseases.

The determination would be made from a detailed study of a blood sample taken from the mother during pregnancy. The same sample also could yield information as to the sex of the fetus.

Dr. Goodman has been awarded a \$32,500 grant by the National Institute of Child Health and Human Development to support his work on the detection of chromosome abnormalities of the fetus. He is principally interested in the early detection of Down's syndrome, but he said the test could permit prenatal diagnosis of up to 40 genetic disorders.

The test involves chromosomal studies of white cells from the fetus. Some fetal white cells are found in the blood stream of the mother and can be harvested by drawing a blood sample. Before the test becomes practical for general use, however, a way must be developed for readily distinguishing fetal white cells from maternal white cells and separating them for study. Much of Dr. Goodman's work during the next two years will be devoted to that problem.

Dr. Stephen H. Richardson, associate professor of microbiology, recently returned from Japan where he participated in an international meeting on cholera. He presented a paper on "Factors Influencing Toxicogenicity in *Vibrio Cholerae*" at the annual meeting of the Cholera Panel of the United States-Japan Cooperative Medical Science Program.

Dr. Richardson is one of only about 30 U. S. scientists who are actively conducting research on cholera. His work over the past six years on the organism (*vibrio*) that causes cholera was significant in the development last year of a new cholera vaccine.

* * *

Dr. Robert W. Gibson, Jr., a second-year resident in psychiatry at North Carolina Baptist Hospital, has been named a Falk Fellow of the American Psychiatric Association. The fellowship, which became effective in September, will enable Dr. Gibson to participate on committees and councils of the association. He was one of 29 psychiatry residents selected as Falk Fellows by a committee of the American Psychiatric Association.

The fellowship program was established two years ago "to identify promising young leaders in psychiatry and to bring their thinking to bear on the evolution

Dr. Gibson is a native of Fayetteville.

* * *

Seventy-six first-year medical students began classes Sept. 2 at the Bowman Gray School of Medicine. The class, selected from 1,924 applicants, represents 14 states and one foreign country. They received their undergraduate education at 36 colleges and universities.

Forty-one members of the class are North Carolinians, each of whom received a \$250 tuition reduction through funds appropriated by the 1969 North Carolina General Assembly for cost-of-education grants to the state's two private medical schools.

* * *

Dr. Eugene R. Heise, assistant professor of microbiology at the Bowman Gray School of Medicine, represented the Bowman Gray School of Medicine at the Third International Transplantation Meeting Sept. 7-11 at the Hague, The Netherlands. All major areas of human transplantation were discussed by the world's experts in the field. The meeting was sponsored by the International Transplantation Society.

of the association's programs and policies."

* * *

Dr. Thomas B. Clarkson, Jr., professor and director of the Department of Laboratory Animal Medicine, participated in the International Conference of Primatology Aug. 1-6 in Zurich, Switzerland. He was a representative of the National Academy of Sciences.

* * *

Dr. Richard W. St. Clair, assistant professor of pathology, presented a paper on "The Effect of Cholesterol Feeding and Atherosclerosis on Lipid Metabolism of the Arterial Wall" at the fifth annual Washburn Lectures at Colorado State University and Washington State University.

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Dr. William G. Anlyan, vice president for health affairs, went to Poland, Yugoslavia, and Israel in September on a three-week mission for the Board of Regents of the National Library of Medicine.

Members of the mission examined major health science information centers in each country, with special attention to critical review and scientific translation activities, and they inspected health education programs and facilities.

In Jerusalem Dr. Anlyan presented a lecture on the progress of health education programs at Duke to the faculty of Hadassah Medical School. Later he traveled to Rome to present a plaque from Duke to the newly organized University of the Sacred Heart School of Medicine at the Vatican. The school is establishing an American-style curriculum in medical education.

* * *

Dr. Jay M. Arena, professor of pediatrics and director of the Duke Poison Control Center, is the author of a comprehensive work entitled "Poisoning-Toxicology, Symptoms, Treatments."

The 746-page volume deals with prevention and treatment of poisoning from all sources in adults and children.

Earlier this year, Dr. Arena edited the ninth edition of "Davison's Compleat Pediatrician," a standard pediatrics text, and co-authored "Human Poisoning from Native and Cultivated Plants."

* * *

Dr. E. Harvey Estes, chairman of the Department of Community Health Sciences, was one of six distinguished educators to contribute articles to a "Symposium on Trends in Medical Education" published recently in *Modern Medicine*.

The title of Dr. Estes' paper was "The Training of Physicians' Assistants: A New Challenge for Medical Education."

* * *

Dr. P. K. Lauf, assistant professor of physiology, attended the Sixth Berlin Symposium on Structure and Function of the Erythrocyte August 18-22 in East Berlin, Germany, to present a paper on "Treatment of M-positive HK and L-positive LK Sheep Red Cells with Neuramindase." Co-authors of the paper include Dr. D. C. Tosteson and Miss M. L. Parmelee.

* * *

Dr. Matt Cartmill, assistant professor of anatomy, attended the International Primatological Conference in Zurich, Switzerland, in early August.

* * *

Dr. D. Robert Howard, director of the Physician's Assistant Program, presented a talk on the program at the Wisconsin Society of Internal Medicine meeting September 18-9 at Lake Geneva, Wisconsin.

* * *

Dr. D. Bernard Amos, James B. Duke professor of immunology and experimental surgery, has been

named chairman of the immunology study section of the Division of Research Grants, National Institutes of Health.

* * *

Dr. J. David Robertson, chairman of the Department of Anatomy, has spent much of the summer attending scientific meetings in Europe.

He visited Professor J. Z. Young at University College, London, and then spent nearly a month at the Stazione Zoologica in Naples.

He attended the Ninth International Congress of Anatomists in Leningrad and the Third International Liquid Crystal Conference in Berlin. From August 30 to September 5, he was in Grenoble for the Seventh International Congress on Electron Microscopy.

* * *

Dr. William W. Shingleton, chief of the division of general surgery, took part in a site visit to the Central Oncology Group in Madison, Wisconsin.

Dr. Shingleton also attended a site visit for the National Cancer Advisory Council in Pittsburgh.

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH SCIENCES

NEW APPOINTMENTS

Dr. Irwin Clark, professor, is professor of medicine at Columbia University. He has also served as visiting professor of biochemistry at Rice University since 1963. He received his B.A. from Harvard and his Ph.D. from Columbia. This appointment is effective January 1, 1971.

Dr. Ruth E. Bulger, associate professor of anatomy, has been assistant professor of pathology at the University of Washington.

Dr. Floyd A. Fried, associate professor of surgery, has been assistant professor at the University of Chicago.

Dr. Abdullah Fatteh, associate professor, has been assistant professor of legal medicine at the Medical College of Virginia.

Dr. David Kerndt Wiecking, associate professor, has been assistant professor at the University of Virginia.

Dr. I. Glenn Wilson, associate professor, has been associate dean for Community Health Service and research associate at the UNC Health Services Research Center.

Dr. David F. Adcock, assistant professor in radiology, is a fellow in nuclear medicine at Duke University.

Dr. David R. Brown, assistant professor, has been resident and assistant instructor at Ohio State University Hospital.

Dr. Paul L. Martin, Jr., assistant professor in the Department of Psychiatry, was a psychology intern at the University of Chicago Medical School.

Dr. William L. Saylor, assistant professor in radiology, has taught at the Walter Reed Institute of Nursing and the Walter Reed Institute of Research.

Dr. Katherine M. Six, assistant professor, has been a research associate and lecturer at the University here.



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That's the real shame of it. The fact that every fourth cancer death is totally needless. In many cases, the doctor could have cured the cancer if their patients had come to them sooner.

One thing everyone should do is take time to learn the seven warning signals of cancer. We tell our subscribers they won't prevent them from getting it,

but they could save their life.

Here they are:

1. Unusual bleeding or discharge
2. A lump or thickening in the breast or elsewhere
3. A sore that does not heal
4. Change in bowel or bladder habits
5. Hoarseness or cough
6. Indigestion or difficulty in swallowing
7. Change in wart or mole

Of course, medical research is constantly working to find better ways to cure cancer.

And doctors are quick to put these

discoveries to work.

But there's more than just treatment. There's prevention. We at North Carolina Blue Cross and Blue Shield feel the more your patients know about cancer the better they'll be able to protect themselves against it.

We're also striving to remove the financial barriers for those who need medical care. We maintain a strong, unique relationship with the profession that helps make better health possible for everyone.

We believe there's more to good health than just paying bills.



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Dr. Roy A. Weaver, assistant professor in pathology, has spent the last two years in the U. S. Army as a captain.

Dr. John R. Gray, Jr., assistant director for administration, Division for Disorders of Development and Learning, has been administrative director of the Mecklenburg County Mental Health Center.

Dr. Ivan Hyde, visiting assistant professor, is a consultant radiologist for Southampton Hospitals, England.

* * *

Miss Margaret L. Moore has been appointed assistant dean for Allied Health Professions Programs in the UNC School of Medicine here.

The announcement was made by Dr. Isaac M. Taylor, dean of the School.

Miss Moore's new responsibilities will include advising the dean on the development and coordination of existing allied health professions curriculums and programs in the school. She will also advise on the possible organization and development of new types of programs for the School.

Currently, the allied health professions programs consist of physical therapy, medical technology, radiological technology, cytotechnology, histo-pathology with electron microscopy technology, a chaplain's program in clinical pastoral education, and a program for blood bank technicians.

Miss Moore currently is director of the Division of Physical Therapy and associate professor of physical therapy and will maintain these responsibilities.

* * *

Dr. Colin G. Thomas, Jr., chairman and professor, Department of Surgery, presented a paper "Sphincterotomy or Choledochoduodenostomy for Benign Common Duct Obstruction?" at the Halsted Society 1970 Scientific Program recently.

Also presenting a paper was Dr. Nathan A. Womack, Kenan professor and chairman emeritus, Department of Surgery. It was entitled "The Development of Gallstones—An Experimental Study."

* * *

The University of North Carolina School of Medicine's Medical Science Lecture series this year will be conducted each Saturday morning from Sept. 26 to Nov. 21. Title of the series will be "Environmental Factors in Medicine."

* * *

Dr. Oscar Sapp, associate professor of medicine, was the lead-off speaker for the postgraduate course in medicine which began Sept. 22 & 23 in Morganton and Hendersonville.

Sponsored by the Medical Societies of Henderson and Burke Counties and the Office of Continuing Education at the UNC School of Medicine, the course consists of a series of two lectures each week for six weeks.

Also participating in the course from the UNC Medical School is Dr. Robert T. Herrington, assistant professor of pediatrics.

Miss Vella G. Nelson, chief nurse anesthetist at N. C. Memorial Hospital, was elected president of the American Association of Nurse Anesthetists (AANA) at the group's annual meeting held in Houston recently.

* * *

Pharmacists are getting out from behind the counter and into active areas of patient care, according to Dr. George P. Hager, dean of the UNC School of Pharmacy.

In his speech before the 30th annual convention of the American College of Apothecaries in Milwaukee, Dr. Hager suggested that pharmacists were ideally suited to fill the void in medicine by joining the health care team in a more active way.

Pharmacists, he pointed out, are highly trained professionals able to contribute skilled knowledge and personal attention to patients.

Dean Hager is a fellow of the American College of Apothecaries.

* * *

Dr. Walter E. Stumpf, associate professor of anatomy and pharmacology and member of the Laboratories for Reproductive Biology at the University here, attended the third International Congress on Hormonal Steroids in Hamburg, Germany. He presented a report on "Steroid Hormones in the Brain."

Following the conference, he gave lectures at the Department of Neuropathology of the University of Gottingen and the Max-Planck Institute for Brain Research in Frankfurt.

Eighteen former maids, clerks and cafeteria workers here have been graduated from an intensive seven-month program which prepared them for employment as laboratory assistants.

Featured speaker for the occasion was Elton Jolly, director, Opportunities Industrialization Center, Inc. of Philadelphia, who challenged the new graduates to continue their upward mobility.

The laboratory assistants program was begun at the UNC School of Medicine last February in an effort to retrain displaced University cafeteria workers and to fill the skilled manpower gap which exists in North Carolina.

Funded by the Babcock Foundation, the Medical School, the University of North Carolina at Chapel Hill, and the U. S. Labor Department's New Careers program, the graduates studied both academic and technical courses.

All 18 graduates have been placed in jobs in the University. Two will be at North Carolina Memorial Hospital, and the rest in the School of Medicine with one in computer programming, one a computer technician and others in various research labs.

* * *

Dr. H. Stanley Bennett, Sarah Graham Kenan Professor of Biological and Medical Sciences, at the invitation of the All Union Society of Anatomists, Histologists and Embryologists, attended the IX International Congress of Anatomists held in Leningrad in August. He presented a paper, "Topology of Cell Membranes," as an introduction to the topical session on Cell Ultrastructure.

Dr. C. Arden Miller who is vice chancellor, Health Sciences, at the University of North Carolina, has resigned effective February 1, 1971, and will assume professorial duties in the Department of Maternal and Child Health in the School of Public Health at Chapel Hill.

Dr. Miller's decision to relinquish the administrative position he has held here since 1966 was made known by Chancellor J. Carlyle Sitterson in a presentation to the Board of Trustees' executive committee, and approved by that committee and by President William Friday.

Vice Chancellor's Miller's administrative role has taken purview over the six-fold medical health complex at Chapel Hill, including the School of Medicine, Public Health School, Pharmacy School, School of Dentistry, School of Nursing, and the North Carolina Memorial Hospital.

Chancellor Sitterson stated: "Dr. Miller has given outstanding leadership during his four years as vice chancellor, Health Sciences. These years have been characterized by major expansion of facilities, faculty and enrollments in the health schools. These expansions and the new and innovative curricula will enable the University to increase appreciably the quality of and the numbers of health manpower for the State of North Carolina. The University is glad that he will remain to continue his important contribution to the teaching and research in the Department of Maternal and Child Health in the School of Public Health."

An internationally prominent pediatrician and medical administrator, Dr. Miller was dean and provost of the School of Medicine and Medical Center of the University of Kansas from 1960 to 1966.

He is a native of Shelby, Ohio, a graduate of Oberlin College, and received his M.D. degree at Yale University Medical School in 1948. He has taught and practiced pediatrics in New Haven, in Kansas City, and was director of the Children's Rehabilitation Unit of the University of Kansas Medical Center. Dr. Miller was named a Markle Scholar in Medical Science in 1955.

He was vice president of the Association of American Medical Colleges in 1966, and is a member of the American Medical Association, the Society for Pediatric Research, and other professional organizations. He is author of some 35 articles in professional journals.

At a recent meeting the AMA Board of Trustees changed the name of the newly established Committee on Emergency and Disaster Medical Care to Committee on Emergency Medical Services. George W. Paschal, Jr., M.D. of Raleigh was named to membership on the Committee. He also continues to serve as Chairman of AMA's Council on National Security.

* * *

Dr. Claude Frazier of Asheville was honored as West Virginia Tech's Alumnus of the Year at an alumni banquet held during the school's 1970 graduating exercises.

NEWS NOTES FROM THE NORTH CAROLINA REGIONAL MEDICAL PROGRAM

Dr. Ron W. Davis, former faculty member of the University of North Carolina, has been named to the position of Director of Continuing Education of the North Carolina Regional Medical Program.

Announcement of the appointment was made recently by Dr. F. M. Simmons Patterson, Executive Director.

In the newly-created post, Davis will maintain liaison with the Continuing Education Committee of the State Medical Society and the Divisions of Continuing Education of Duke, Bowman Gray, and the University of North Carolina medical schools.

He will also coordinate Regional Medical Program projects for the continuing education of physicians, nurses, and other health workers.

Since 1967, Davis has been associate professor, School of Education, University of North Carolina in Chapel Hill. As Director of Field Experiences in undergraduate Teacher Education, he was involved in the placement of student teachers and directed leadership institutes for principals and summer workshops for teachers.

A native of Spokane, Washington, he came to Chapel Hill from Euclid, Ohio, where he was assistant superintendent of elementary education in the Euclid Public Schools.

He served on the graduate school faculties of Columbia University, University of Pennsylvania, Lehigh University, and Beaver College. Previously, he held teaching and administrative positions at the elementary and the secondary levels of education.

Davis received his B.A. from Reed College in Portland, Oregon, and his M.A. and Ed.D. from Teachers College of Columbia University. He has done research in the areas of education, administration, and the improvement of school practices.

* * *

No matter where he may be—in an isolated hamlet on the Outer Banks or in a microscopic mountain community—a North Carolina physician can receive factual information, bibliographical material, books, or copies of any piece of printed medical literature. All he has to do is phone or write the Medical Library Extension Service, funded by the North Carolina Regional Medical Program. Requests for information or materials may also be made through a hospital library to the Medical Library Extension Service, or through a local public library where they are relayed by WATS line to the state library and thence by teletype to the Extension Service.

The service stems from four medical libraries: Duke University Medical Center; University of North Carolina Health Sciences, Chapel Hill; Bowman Gray School of Medicine; and the Medical Library of Mecklenburg County. Requests which can't be filled from these bases (involving 300,000 plus volumes) are referred to the National Library of Medicine.

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Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

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Warnings: Pro-Banthine with Dartal should not be administered to patients who are under the influence of barbiturates, alcohol or narcotics. The drug should be administered cautiously to epileptic patients or those in depressed states, patients with liver disease and to pregnant women. Hypersensitivity to Dartal may occur rarely in patients with known sensitivity to similar drugs.

Side Effects: Dryness of the mouth, mydriasis, hesitancy of urination; less commonly extrapyramidal (restlessness, dystonia and signs of pseudoparkinsonism such as muscular rigidity, fixed facies, tremor, ataxia, festinant gait and drooling), parasympatholytic (blurred vision, xerostomia, hypotension, nasal congestion and constipation) and curare-like (loss of control of voluntary muscles, particularly the muscles of respiration) reactions. Rarely, leukopenia or allergic purpura. A generalized erythematous skin reaction may occur. Side effects characteristic of phenothiazines such as grand mal convulsions, altered cerebrospinal proteins, cerebral edema, potentiation of the effects of atropine, heat or phosphorus insecticides, autonomic reactions, endocrine disturbances, reversed epinephrine effect, hyperpyrexia or pigmentary retinopathy may theoretically occur but have not been reported with Dartal. Severe hypotension following recommended doses occurs more commonly in patients who are also afflicted by other medical disorders such as mitral insufficiency or pheochromocytoma, and particular attention should be paid to such a possibility although this has not been observed with Dartal.

Adult Dosage: One tablet three times a day.
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Warning: May be habit-forming.

For **Indications**, **Contraindications**, **Precautions**, **Side Effects** and **Dosage** see Pro-Banthine. In addition, phenobarbital should be administered with caution to patients with liver disease, mental disturbances or a significant degree of hypoxia.

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For **Indications**, **Contraindications**, **Precautions** and **Side Effects** see Pro-Banthine.

Dosage Form: Capsule-shaped, compression-coated, peach tablets of 30 mg. for oral use.

Dosage: The recommended initial dosage is one tablet in the morning and one at night.

In an eight-month period, 623 duplicate medical journals went to 18 hospital libraries. Some 200 reference questions, 141 of them involved in preparation of bibliographies, were answered for individuals, and 3245 loans and photocopies were furnished 85 different physicians and other health workers.

• • •

Thirty-eight new project applications have been made to the North Carolina Regional Medical Program for fiscal year July 1, 1970 to June 30, 1971. These, along with renewal applications, will furnish the basis of the N. C. RMP program for the year ahead.

The new proposals reflect N. C. RMP's recent promotion of new applications from all interested sources, so long as they fell within its priority framework, demonstrated new approaches to better health care for more North Carolinians, and related to approved categories (heart disease, cancer, stroke, and related diseases).

Following a rigid review cycle by N. C. RMP core staff, the executive committee, categorical committees, and the board of directors and advisory council, approved projects will go to the Regional Medical Programs Service in Washington February 1 where they will undergo a similar cycle.

• • •

Priorities for projects and program activity of the North Carolina Regional Medical Program in the year ahead, as developed by a joint committee of the N. C. RMP board of directors and advisory council, will be: regionalization; manpower; local initiative; and critical needs as revealed through baseline data.

According to F. M. Simmons Patterson, M. D., executive director, "The focus of the North Carolina Regional Medical Program will continue to be on problems involving heart disease, cancer, stroke, and related diseases. This broad categorical approach," Patterson says, "will be considered in developing specific programs through a region-wide effort. We also see a great need," he added, "for judicious use and upgrading of existing manpower through continuing education and training in the medical, allied, and associated professions. And further, local initiative must be emphasized if our programs are to be implemented. The needs in our state," he added, "regarding the categorical and related diseases, will be identified in accordance with factual data now being developed by N. C. RMP."

• • •

The first RMP project in dentistry in the nation began its third year of operation in October. N. C. RMP's "Continuing Education in Dentistry," involving six North Carolina hospitals and the dental community surrounding them, will concentrate on dental facilities the hospital can best provide to facilitate joint management by dentist and physician of the patient with both dental disease and systemic disorders. All phases of the patient's care, from admission to discharge, will be covered at the participating hospital. Addi-

tional hospital personnel will participate, including operating room personnel and hospital administrator. Involved are dentists from Reidsville, who will meet at Annie Penn Memorial; Asheville, Memorial Mission; Greenville, Pitt County Memorial; Wilson, Wilson Memorial; Salisbury, Rowan Memorial; and Hendersonville, Margaret Pardee Memorial.

• • •

Nine new hospitals have joined 11 others which are participating in the Central Cancer Registry of the North Carolina Regional Medical Program. Project director is James F. Newsome, M.D.

The Central Cancer Registry, one of five ongoing cancer projects funded by N. C. RMP, provides a statewide, uniform comprehensive method of collecting, storing, and retrieving computerized data. Through the registry, vital cancer information can be furnished immediately to physicians, hospitals, and medical schools, and ultimately improve care for cancer patients.

New participants in the registry, which is administered by the State Board of Health, are Cleveland Memorial Hospital, Shelby; Memorial Hospital of Wake County, Raleigh; Moore Memorial, Pinehurst; Pitt County Memorial, Greenville; Carteret General, Morehead City; Richmond Memorial, Rockingham; Valdes General; Onslow Memorial, Jacksonville; and Scotland Memorial, Laurinburg.

• • •

Dr. Edgar T. Beddingfield, Jr., M.D., Wilson, past-president of the North Carolina Medical Society has been named to the Advisory Council of N. C. RMP. Other new appointees to the Council are William A. Robie, M.D., Raleigh; and Ernest Furgurson, M.D., Plymouth. Named to the Board of Directors is Charles W. Styron, M.D., president-elect of the North Carolina Medical Society.

Seven new hospitals are participating in the statewide Cardiopulmonary Resuscitation Project, funded by the North Carolina Regional Medical Program and administered by the North Carolina Heart Association.

The program aims to restart a human heart through external massage and mouth-to-mouth resuscitation within the first critical five minutes—before there is brain damage.

Hospital teams consisting of a physician, nurse, and administrator from each of the newly participating hospitals were recently oriented to the project at headquarters of N. C. RMP. Hospitals involved are: Bladen County, Elizabethtown; Marion General; Lee County, Sanford; Our Community, Scotland Neck; Warren General, Warrenton; Bertie County, Windsor; and Lula C. Hoots Memorial, Yadkinville. A total of 62 hospitals is now participating in the project.

Besides providing assistance to hospitals in establishing emergency procedures and training their personnel for action, the project provides for hospital-based teams to train selected groups in each hospital's community in simple life-saving techniques.

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SCHOOL OF MEDICINE
Continuing Education Program
1970-1971**

Postgraduate Schedule

Problems of the Newborn—1970

November 13-14, 1970

Asthma Conference

December 11, 1970

Eighth Annual Medical Seminar

The Homestead, Hot Springs, Virginia

February 17, 18 and 19, 1971

(Followed by the Virginia Section Meeting of the American College of Physicians—February 20, 1971)

Student Cancer Day

March 5, 1971

Spring Series of Thursday Afternoon Lectures

March 4-April 29, 1971

Course in Electrocardiography and Vectorcardiography

March 25, 26 and 27, 1971

Swineford Allergy Conference

April 2, 1971

Intensive Respiratory Care Workshop for Physicians

May 13, 14 and 15, 1971

For further information and detailed programs, write to the Continuing Education Program, Box 333, University of Virginia Medical Center, Charlottesville, Virginia 22901.

SOUTHERN MEDICAL ASSOCIATION

The Medical Students' Program was inaugurated because the Council of the Southern Medical Association wanted to show, by specific action, the enormous interest the Association had in medical education.

The Student Seminar will be held again this year as part of the scientific program during Southern Medical Association's 64th Annual Meeting, to be held in Dallas, Texas, Nov. 16-9. The morning session, under the direction of N. C. Hightower, Jr., M.D., is scheduled for Thursday, Nov. 19, and will feature the three winning essays from the Junior Division and the three winning essays from the Senior Division of the official Medical Student Representatives' Essay Contest.

All physicians are invited to attend this educational session.

Blood Plan Grants \$12,500 to Hemophiliacs

Fifty area hemophiliacs have become eligible for \$250 each to defray blood replacement expense from the Cooperative Blood Replacement Plan. The grant was announced recently in a joint statement by Frank E. Trobaugh, Jr., M.D., president of the Plan, and Robert J. Faust, president, Midwest Chapter, The National Hemophilia Foundation.

According to Dr. Trobaugh, "It has long been the objective of the Cooperative Blood Replacement Plan to assist persons with blood complications such as leukemia and hemophilia. The enrollment of 50 of the 300 midwest area hemophiliacs as special CBRP

members is a step in the right direction. But the public's support in becoming members of this program will hasten the time when the CBRP will be able to meet the total need of area hemophilia victims."

For information write the Cooperative Blood Replacement Plan, 2000 N. Lincoln Park West, Chicago, Illinois 60614.

In Memoriam

John Pinckney Harloe, M.D.

John Pinckney Harloe was born in Matoaka, West Virginia, November 6, 1921. The son of a family physician, he sought out his father's profession and received his M.D. degree from the University of Virginia Medical School in 1945. After taking his hospital training at the University of Virginia Hospital in Charlottesville, he came to Charlotte to practice family medicine.

Having married while a student, he was blessed with a son and a daughter, and with his recent marriage to Farrior Ashcraft Henley, he acquired another son and daughter. These, plus his mother, two brothers, one of whom is a physician, and a sister, remain as survivors.

Always interested in organized medicine, he worked diligently and was deservedly awarded with many offices. He was Chief of Staff at Presbyterian Hospital, chairman of the Department of General Practice at Presbyterian and Mercy. In 1963, he served as President of the Mecklenburg County Medical Society at a time when Good Samaritan became Community and guided us expertly through the maze. For the past three years he was chairman of the Development Committee of the University of Virginia Medical School and was responsible for the enlargement and development of the facilities there. As a most active member of AAGP, he was on the national Constitution Committee; and having served in previous years as president of the Mecklenburg County Chapter, was president of NCAGP during this past year. He served as a member of a Blue Ribbon Committee of the Medical Society of the State of North Carolina, which was responsible for major changes and improvements in the structure of the administrative office, committee realignment, and a new format for the annual meeting. Governor Scott appointed him to serve on the Governor's Committee for Comprehensive Health Planning.

His contribution to medicine in this county and state is immeasurable in both quality and quantity. He was constantly involved in total care to his patients and worked diligently on the local, state, and national levels for the training and production of more family physicians. An unfillable vacuum has been created by this physician's untimely death on June 3, 1970 at age 48. He will be sorely missed by the profession as well as his community of patients and friends.

John Harloe's life was a tripartite one: Complete devotion to family practice, burning desire of his hob-

by—hunting with his dogs, and expert guidance, care, and love for his family. A task, be it medical or otherwise, would never be attempted half-heartedly but had to be done completely, thoroughly and without error.

At times, gruff in his mannerisms and caustic in his remarks, he would measure his friend or adversary and then proceed along proper lines with an open mind well versed in the subject at hand. Always he was considerate of the feelings of others and was possessed of a consummate gentility. To his patients, he had no superior peer.

As a dear friend of his once said; "I don't always see eye to eye with John and have had violent disagreements with him, but he will always have my respect." This statement sums up the feelings of his friends and colleagues.

To his family and friends, we express our deepest sympathy. He will be remembered as a positive leader of men and medicine, a man of integrity, of strong character, and a true friend.

Mecklenburg County Medical Society

**Benjamin Bruce Langdon, M.D.
1912-1970**

Benjamin Bruce Langdon, 57, of Fayetteville, North Carolina died April 4, 1970, of bronchogenic carcinoma after an illness of three months. Born in nearby Coats, North Carolina, July 25, 1912, he was a graduate of the University of North Carolina and the Jefferson Medical School class of 1938. Following internship at the U. S. Naval Hospital, Portsmouth, Virginia, he was attached to the Navy as a medical officer, at the beginning of World War II, stationed in the Philippines. Captured on Baatan, he survived the Baatan March and remained a Japanese prisoner for the duration of the war. He was one of 350 prisoners of a total

of 1619 to survive the sinking of three ships when transferred from Manila to Japan in 1944. Following the Japanese surrender in 1945, Dr. Langdon was rescued by the Russians at a Manchurian prison camp. He was awarded the bronze star and other decorations.

Upon his return to the States he was hospitalized and treated for pulmonary tuberculosis and later retired from the Navy with rank of Captain.

He was trained in urology at the New York Hospital and entered private practice in Fayetteville in 1952.

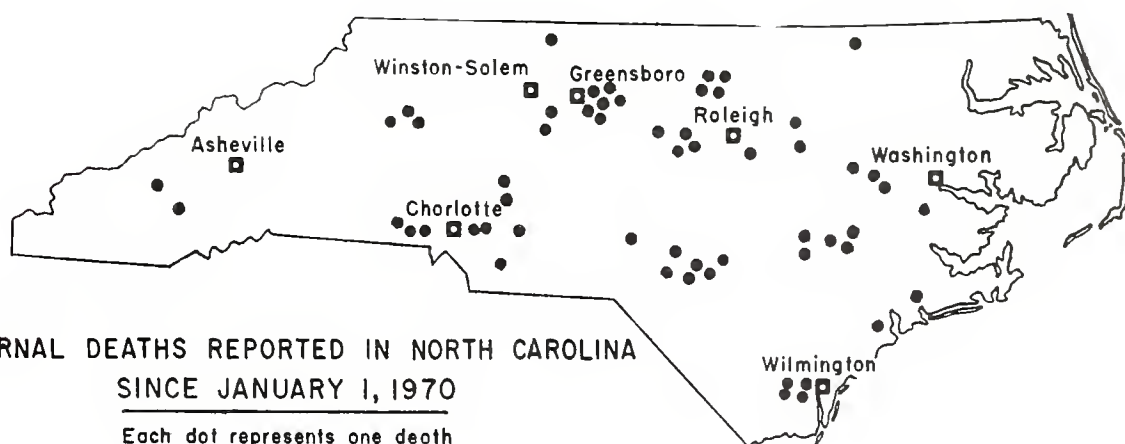
Dr. Langdon, a charter member of the Association of Clinical Urologists, also held membership in the American Urological Association, the Southeastern Section of the American Urological Association, and the American Medical Association. He was a diplomate of the American Board of Urology and a fellow of the American College of Surgeons. He was a past president of the Cumberland County Medical Society and the Carolina Urological Association. He was consultant in Urology to the Fayetteville Veterans Administration Hospital, the Womack Army Hospital, and the Sampson County Memorial and Betsy Johnson Memorial hospitals. He had served as chief of staff and chief of surgery of the Cape Fear Valley Hospital. He was a charter member of the Fayetteville Squadron of the United States Power Squadron and a member of the Highland Presbyterian Church.

Dr. Langdon is survived by his wife, Mrs. Helen Bennett Langdon, and two sons, Bruce David and Andrew Lloyd. The Dr. Benjamin Bruce Langdon Intensive Care Unit of the Cape Fear Valley Hospital has been established as a memorial to a man who served his country at immeasurable sacrifice, a man who exhibited admirable innate modesty and who dedicated his life with extraordinary devotion to the service of his patients and his profession.

J.S.R.

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IN THIS ISSUE:

Psychiatry And The Criminal Law Process In North Carolina

JOHNNIE L. GALLEMORE, JR., M.D.

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the Month in Washington

The American Medical Association emphasized that the quality of medical care should not be sacrificed for the sake of economy in government health care programs.

Dr. William O. LaMotte Jr., of Wilmington, Del., chairman of the AMA's Council on Legislation, repeatedly stressed the importance of assuring high quality care in testimony at a Senate Finance Committee hearing on proposed changes in medicare and medicaid.

He also pointed out the advantages of the AMA's plan for review of physicians' services aimed at holding down costs over an alternative proposal before the committee. The AMA supported a provision of the proposed legislation that would provide for physical therapy services but opposed including chiropractic services under Medicare.

Dr. LaMotte said that there should be pilot projects before a "Health Maintenance Organization" program is started nationwide. A HMO would provide both hospitalization and physicians' services for Medicare patients for a set per capita amount.

There are questions regarding in-fact cost savings, as well as the quality of health care which may be provided when there are economic incentives to providers to reduce utilization. We wish to assure that medicare patients uniformly receive the best quality care.

To this point of quality care, we have one additional concern. As defined in the bill, the HMO may be a "for-profit" organization and one managed, controlled and operated by lay individuals. Under such circumstances, the incentive for profit and/or lack of the basic essentials of knowledge, training and experience in medical matters could result in the patient being furnished less than the optimum of quality care. To avoid such a result, we recommend that organizations delivering health care should be under the control and guidance of medical personnel.

Dr. LaMotte also questioned the desirability of a provision that would restrict payments to institutions.

He assured the committee that the na-

tion's physicians as a group "share the concern of the public and the Congress" concerning rising health care costs. But, he said, the AMA must oppose a provision that would substitute an arbitrary statutory limitation on physicians' fees for the "reasonable" fee now allowed. He said cost factors were too complex for such a simple solution and that the arbitrary limitation would make the medical profession the only sector of the nation's economy under price or wage controls.

As for utilization or peer review, Dr. LaMotte said the AMA objects "most forcefully" to a provision of the pending legislation that would have non-medical groups act as review teams and pass judgement on medical services.

Following Dr. LaMotte's testimony, the committee modified somewhat the professional review amendment sponsored by Sen. Wallace F. Bennett of Utah, second-ranking Republican on the committee, after he earlier heard an AMA spokesman advocate the peer review principle.

The modified version relaxed a requirement for preadmission clearance to hospitals for elective surgery to leave the matter of such a requirement up to review agencies. But the committee version would permit the Secretary of Health, Education and Welfare to enter into agreements with organizations or agencies other than state medical societies for administering the review programs in areas of 300 or more physicians. The AMA contended strongly that the responsible agencies should be only state medical societies.

Meade Whitaker, tax legislative counsel for the Treasury Department, asked the committee to add a provision to the legislation that would require health insurance companies and carriers to report unassigned payments to physicians and other providers of health care. Unassigned payments go di-

rectly to patients to be given by them to their physicians. A similar proposal was knocked out of last year's tax reform legislation by a House-Senate conference committee.

The AMA—along with the carriers and HEW—have opposed mandatory reporting by carriers of unassigned payments on the grounds that it would be difficult and costly to furnish the data and that, in many instances, the patient might not have passed along the payment to the physician. This last circumstance unfairly would put on the physician the burden of proving that he did not receive such income.

Whitaker said the Internal Revenue Service had found that more than half of 3,000 physicians who received \$25,000 or more in government Medicare or Medicaid payments in 1968 failed to report a substantial amount of their income to the tax agency.

The audits were ordered after the senate committee raised the question of whether physicians receiving a large total of annual payments under the government medical programs were paying income taxes on all of it.

"Preliminary results indicate a number of instances of substantial unreported income, including some where the omission exceeds \$100,000," Whitaker said.

Sen. Russell B. Long (D., La.) said the investigation had disclosed a "vast area of tax cheating" and urged the IRS to initiate criminal prosecutions against doctors who had hidden their Medicare or Medicaid income.

Long added that, as far as he could see, the AMA "from the ethical point of view on taxes, has been completely forthright and honorable and sought to shield no one."

* * *

The Nixon Administration came out strongly against the cradle-to-grave comprehensive national health insurance legislation sponsored by Sen. Edward M. Kennedy (D., Mass.) and supported by organized labor leaders.

John G. Veneman, Under Secretary of Health, Education and Welfare, testified before the Senate Committee on Labor and Public Welfare, that the program that would be provided by the legislation "is not a

proper or workable approach to the solution of the health problems of this nation" and would cost \$77 billion in the first year or full operation.

AMERICAN ASSOCIATION OF BLOOD BANKS

The Board of Directors of the American Association of Blood Banks on July 14, 1970 approved a statement on the status of tests for identifying viral hepatitis carriers. This statement stresses that although testing for Australia antigen as a donor screening test continues to show exciting promise, the same problems which were described in the National Research Council statement, released in January of this year, continue to exist. Therefore, the Association maintains that such testing cannot reasonably be performed routinely yet and must continue to be regarded as experimental—primarily for purposes of research.

The National Research Council's "Statement on Laboratory Screening Tests for Identifying Carriers of Viral Hepatitis in Blood-banking and Transfusion Services" was published in the January-February 1970 issue of *Transfusion*, official Journal of the AABB. It noted, in part: "... it is clear that the sensitivity and specificity of the test for Australia antigen vary among laboratories, and there is no agreement on the establishment of a uniform test or tests. Such agreement would be essential before any test could be brought into general use."

The Association statement points out that this screening test, at present, will detect only a fraction of all hepatitis carriers. The size of this fraction has varied from investigator to investigator. At the present time many blood banks will find that they are unable to enter into arrangements to routinely provide blood which has been tested, with negative results, even though the blood bank's particular research effort involves large scale testing.

Angiography Called Boon in Surgery of Ischemic Limb

New x-ray techniques combined with improvements in the quality and safety of contrast media are providing surgeons with the "definitive angiography" needed to deal with ischemic lower limbs, according to a scientific exhibit at the American Medical Association clinical meeting in Denver, Dec. 1-5.

Angiography plays an increasingly important role due to the growing frequency of occlusive arteriosclerosis. Drs. Lester Blum, Richard B. Nolan and Anthony Vasilas state. Thus, they say, surgeons today are far better equipped to treat the disease than a decade ago when clinical evaluation depended largely on "the traditional history and physical examination."

The research team, affiliated with the department of surgery and radiology at New York's Beekman-Downtown Hospital, reported "complete satisfaction" with the contrast agent Hypaque-M 75% (Winthrop) due to its low viscosity.

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Psychiatry and the Criminal Law Process in North Carolina

JOHNNIE L. GALLEMORE, JR., M.D.

As students of the broad spectrum of human behavior, psychiatrists have long been interested in the law violator. Historically, however, they have often had a vaguely defined, inconsistent relationship with the primary provinces of the accused or convicted criminal—the courts and correctional institutions. Despite developments over the past decade or two in this country which have brought psychiatrists into increasingly more frequent contact with the criminal offender in both judicial and correctional settings, their roles still vary widely and are often controversial. Although many in psychiatry and in law today strongly advocate closer interaction of the two fields, and many oppose any extension of “traditional” relationships, the number of activities in recent years which address their various mutual concerns, especially in the criminal area, have been impressive. These activities have included more frequent symposia, the addition of seminars and courses to curricula of medical and law schools, institution of special training programs, as well as the organization of new groups such as the American Academy of Psychiatry and the Law.

What has accounted for this increased activity? It is unlikely that any single factor has contributed as much as have several simultaneous and parallel developments. First, court decisions in recent years have underscored an era of increased emphasis on individual rights, and closer attention has been directed to the standing of the accused or

convicted at all stages of proceedings. To this end, utilization of all resources for the benefit of the offender has been encouraged. Also, a trend with potentially sweeping consequences has centered upon a reconsideration of criminal behavior in terms of mental and physical illness, of faulty development, or of environmental deficits, in contrast to notions of “moral ineptitude.” Still another development in a crowded, complex, rapidly-paced society has been increased public attention and concern with violence and aggressive behavior, or the political counterpart, “law and order.” Far-reaching questions which focus on basic social and economic structures have been posed. Finally, the growing eminence of social psychiatry and community mental health concepts, varying from the more familiar dyadic approaches to diagnosis and treatment, has undoubtedly spurred greater psychiatric participation in legal proceedings and in correctional programs.¹

Various authors have presented in comprehensive, searching, and in some instances, provocative fashion most of the important issues raised to date concerning participation by psychiatrists in the “criminal process.” Even a brief summary of all the significant views in this extensive literature would unduly enlarge the scope of a paper with a limited purpose; and, unfortunately, citing several important publications runs the very great risk of omitting others of equal merit. Davidson² and Guttmacher,³ in separate volumes, have discussed various considerations surrounding the psychiatrist’s court-room appearance. Abstracts and accompanying discussion (predominantly from a legal point of view) of important criminal law

From the Department of Psychiatry, Duke University Medical Center, Durham, North Carolina, and the North Carolina Department of Corrections.

Requests for reprints to Department of Psychiatry, Duke University Medical Center, Durham, N. C. 27706.

cases with psychiatric relevance are included in a text edited by Allen et al.⁴ Halleck⁵ has traced the history of American psychiatry and the criminal over the past 150 years. In another work⁶ he discusses the nature of criminal behavior and problems of psychiatric criminology. Macdonald⁷ has described various offender types and some management techniques of interest to the psychiatrist. Halleck and Bromberg,⁸ and Slovenko⁹ have edited compilations of the writings of authorities with various professional backgrounds. Correctional psychiatry is the focus of a succinct publication by the U. S. Bureau of Prisons.¹⁰ Finally, traditional and present attitudes about, and approaches and reactions to, crime are discussed in a recent, controversial book by Menninger¹¹. These studies, as well as more circumscribed explorations of certain aspects of the psychiatry-law interface, have contributed historical and current perspectives vital to a meaningful assessment of new developments.

Due to the recently increased interest in the relationship of psychiatry to the criminal law process and the many unsettled issues surrounding it which are likely to gain further attention in the near future, a review of relevant developments in North Carolina and an assessment of current activity in the state appear warranted. This paper addresses, therefore, several specific questions: What psychiatric participation in the criminal court and correctional process is invited by statute in this state? What extent of participation and types of roles have actually resulted in current practice? In what directions is future participation likely to develop?

Method

For purposes of investigating and reporting the nature and extent of psychiatric and related mental health involvement in the affairs of the offender in North Carolina, activities in criminal procedure from pre-trial phases through parole were divided into five major steps: pre-trial evaluations, trial testimony and determination of criminal responsibility, sentencing, corrections, and parole. In each area of activity, a survey

was carried out and data were obtained for periods prior to July, 1970. Interviews were held with the appropriate non-psychiatric administrative officials, with psychiatrists and mental health personnel having experience in that area, and with accused or convicted individuals. Physical facilities, where having any obvious bearing, as would be expected in Corrections, were examined. With the single exception of trial testimony, personal experience as a participating psychiatrist in each area was also utilized as a source of data. Observations and findings were grouped as outlined above and were summarized.

Pre-Trial Evaluation

The pre-trial evaluation represents the earliest stage at which the accused law violator and the psychiatrist are likely to come into contact. The psychiatrist in this case may be a private practitioner or a staff member of either of the state's two forensic units, located at Dorothea Dix Hospital in Raleigh or Cherry Hospital in Goldsboro. The purpose of the evaluation is to assist in the determination of the legal competency of the accused to plead to the charge against him. General Statute 122-91 provides, in part:

Any alleged criminal indicted or charged with the commission of a felony may, on the order of the presiding or resident judge of the Superior Court, in or out of term, be committed to a state hospital for a period of not exceeding 60 days for observation and treatment . . . If at the end of the observation and treatment period . . . the alleged criminal is found to be mentally competent of pleading to the charge against him, the superintendent of the state hospital concerned shall report his findings and recommendations to the clerk of the Superior Court . . . and return him to the county for trial.

The report which results from the pre-trial evaluation provides psychiatric judgments to the court on three specific questions: (1) Is the accused able to plead to the bill of indictment? (2) Is the accused able to understand the charges against him? (3) Does the accused know the difference between right and wrong? Data in the report should support the conclusions which have been drawn over the period of observation, but diagnoses are not required and impres-

sions frequently are limited to a notation such as "without psychosis."

In the event the accused is found incompetent to stand trial, G. S. 122-83 provides for hospitalization at Dorothea Dix Hospital or Cherry Hospital, where the individual "... shall be treated, cared for, and maintained in said hospital ... the person so committed ... may be employed in labor upon the farms of said institutions ... provided, that the superintendent and medical director of the hospitals shall determine, in each case, that such employment is advantageous in the physical and mental treatment of the particular inmate to be so employed. Their confinement in said hospitals shall not be regarded as punishment for any offense." Additionally, G. S. 122-87 provides:

Whenever a person confined in any hospital for the mentally ill and against whom an indictment for crime is pending, has recovered or has been restored to normal health and sanity, the superintendent of such hospital shall notify the clerk of the court of the county from which said person was sent, and the clerk will place the case against the said person upon the docket of the Superior or Criminal Court of his county for trial, and the person shall not be discharged without an order from said court.

Data regarding the extent to which psychiatrists in private practice participate in pre-trial evaluations have not been available. However, statistics from the Forensic Unit at Dorothea Dix Hospital reveal that out of 254 total admissions during the period January through December, 1969, 182 were admitted via court order (under G. S. 122-91). Of this latter number, 140, or 77%, were felt to be competent and were returned to stand trial. Forty-two patients under court order were found not competent to stand trial and were retained for treatment. The number of pre-trial evaluations completed annually in this unit has tripled over the past decade. At the Forensic Unit of Cherry Hospital, 196 admissions out of a total of 304 admissions in 1969 were through court order (G. S. 122-91). One-hundred-eighty-four of those undergoing pre-trial evaluation, or 94%, were found competent to stand trial, while 12 were retained for treatment.

Trial Testimony and Determination of Criminal Responsibility

Perhaps in no area of the criminal law process has more controversy surrounded the role of the psychiatrist than in his presentation of testimony during the trial and prior to the jury's determination of responsibility for the criminal act. The criterion for this responsibility in North Carolina, as in most jurisdictions within the United States, is the M'Naghten formula or rule. First determined in the mid-19th century and bearing an interesting history,²⁻⁴ this formula provides that the defendant is not responsible for his criminal act if he shows that at the time of the offense he was laboring under such a defect of reason from disease of the mind as not to know the nature and quality of the act, or that if he did know it, he did not know he was doing what was wrong. In contrast, the Durham rule, of 1954 vintage, provides that a defendant is not responsible if his criminal act was the product of mental disease or defect. Although it is law in the District of Columbia and the state of Maine, the Durham test has been rejected in North Carolina as it has in most other jurisdictions. Also, North Carolina has not accepted the defense of irresistible impulse, which is permitted in about a dozen other states.

Expert testimony given during the trial by psychiatrists who have examined the defendant is weighed by the jury in light of the M'Naghten rule. The examination upon which the testimony is based may have been performed by clinicians in private practice under special arrangements, or by staff members of the two state hospitals who have responsibility for pre-trial evaluations. Thus, findings from the pre-trial study are frequently utilized in testimony in a trial where the defense of insanity is raised. Actually, the anticipation of such a defense accounts for many requests for pre-trial evaluations. It is important to emphasize, however, the differences in the conclusions expected from the psychiatrist when he prepares a pre-trial report to the court in contrast to the conclusions he may be expected to make relating to criminal responsibility in testimony at

trial. Obviously, the former is a less rigorous test of mental capacity and thus permits the trial of a number of cases where a verdict of not guilty by reason of insanity might ultimately be rendered. Another emphasis involves a temporal distinction, however, in that the pre-trial report is concerned with mental status at the time of psychiatric observation, while determination of criminal responsibility is a retrospective construction of mental status at the time of the crime.

Once a verdict is rendered, the roles of the psychiatrist become much less controversial and fall largely under statutory direction. If a defense of insanity is not successful, or if the defendant is otherwise found guilty of a crime and held legally responsible for it, he is dealt with as outlined in the following section. If a person accused of crime is acquitted at trial upon the ground of mental illness, or is without sufficient mental capacity to receive sentence after a conviction, G. S. 122-84 provides that the court shall detain such a person in custody until an inquisition can be held in regard to his mental condition:

The judge shall cause such witness to be summoned and examined as he may feel proper or as the person so acquitted or his counsel may desire. If upon such inquisition the judge shall find that the mental condition or disease of such person is such as to render him dangerous either to himself or other persons, and that his confinement for care, treatment, and security demands it, he shall commit such person to the hospital designated in Statute 122-83, to be kept in custody therein for treatment and care as herein provided until restored to his right mind.

In this event the individual then appears before his Superior Court judge for further disposition according to law.

Interestingly, G. S. 122-86 provides:

No person acquitted of a capital felony on the ground of mental illness, and committed to the hospital designated in GS-122-83 (see above) shall be discharged therefrom unless an act authorizing his discharge be passed by the General Assembly. No person acquitted of a crime of a less degree than a capital felony and committed to the hospital designated in GS-122-83 shall be discharged therefrom except upon an order from the Governor. No person convicted of a crime, and upon whom judgment was suspended by the judge on account of mental

illness, shall be discharged from said hospital except upon the order of the judge of the district or of the judge holding the court of the district in which he was tried.

Although the act does not prevent application for a writ of habeas corpus, the superintendents of the state hospitals shall certify, prior to discharge of such an individual, that he has been examined and found sane, and that his detention is no longer necessary for his own safety or for the safety of the public.

Sentencing

Once it is determined that the accused has committed a violation of the law and is to be held accountable for it, the court directs its attention to the matter of sentencing. Although no formula for this function is stated as such, it is apparent that punitive, protective, and rehabilitative considerations are entertained, and the final disposition in each case reflects some combination of these and possibly other factors. The court may place the offender on probation, with a suspended sentence, or prescribe an active sentence with no further deliberation, or it may seek consultation in arriving at the most appropriate decision.

Where consultation was requested, North Carolina courts, until recently, placed almost exclusive reliance on its probation officers for presenting available background data. To a limited extent, perhaps, the findings of private psychiatrists who may have participated at earlier points in the proceeding, or findings from periods of observation at the two state hospitals were utilized. However, the 1967 General Assembly of North Carolina, acting upon recommendations based on a recognition of the very limited, frequently non-clinical reports provided in many cases by court officers, enacted statutory provisions for pre-sentence diagnostic evaluations. These provisions enabled the court, upon request, to obtain further consultation in arriving at the most appropriate dispositions. In so doing, the state joined several other states and the federal government, which had enacted similar provisions.

Psychiatrists who serve in the capacity of mental health clinic staff members in the Department of Corrections have assumed a prominent role in the pre-sentence diagnostic evaluations. General Statutes 148-12 provides:

The Department of Corrections shall, as soon as practicable, establish diagnostic centers to make social, medical, and psychological studies of persons committed to the Department. Within the limits of its capacity, and in accordance with standards established by the Department, a diagnostic center may, at the request of any sentencing court, make a pre-sentence diagnostic study of any person who has been convicted, is before the court for sentence, and is subject to commitment to the Department . . . The total time spent in the center shall not exceed 90 days . . . Time spent in the center for diagnostic study shall be credited on any sentence of commitment imposed on the person studied. A copy of the diagnostic study report shall be made available to defense counsel before the court pronounces sentence. The defendant shall be accorded fair opportunity to controvert the contents of the report, if he so requests.

Similar wording, in Section 148-49.3, entitled "Pre-Sentence Diagnostic Studies" specifically provides this service for youthful offenders.

The courts have utilized the pre-sentence diagnostic evaluation with increasing frequency. From inception of the program on August 1, 1967, eight offenders were referred through the end of that year. In 1968, 74 offenders were evaluated; in 1969, 205 offenders were evaluated; and in the first six months of 1970, 145 were referred—for a total of 432 in the first 35 months. Nearly 45% of these offenders were below the age of 21. Reports to the court have reflected physical, neuropsychiatric, psychological, social, religious, vocational, and educational assessments, and have included diagnostic and prognostic impressions as well as specific recommendations for disposition. Data should be available in the future to indicate the use made by the court of reports received, and the follow-up status of subjects evaluated.

In 1969 approximately 12,250 individuals, including more than 1,700 youths below the age of 21 years, were sentenced to active prison terms in the North Carolina Department of Corrections. The psychiatric role in

the evaluation, management and treatment of these convicted persons is described below. Approximately 11,200 other individuals found guilty in this state during that year were placed on probation under the supervision of the North Carolina Department of Probation. Only the judge having jurisdiction of the law violator is authorized to make a referral to the Department of Probation, and a judge alone can change probationary status through court action. Between 75% and 80% of probationers are reported to have completed their period of probation successfully in a department which focuses primarily upon rehabilitation. In the past, psychiatrists have come into contact with the probationer most often in connection with possible violation of probation—that is, in connection with the defense of the probationer. In the absence of deferred sentencing in this state, little use of psychiatrists on a systematic basis has been made, but probation officers have utilized community mental health clinics where these facilities were available.

Recently, psychiatric consultation has been increasingly requested by probation officers, partly perhaps because of greater awareness, and possibly increased availability, of mental health resources. The sharp rise in convicted drug offenders being placed on probation has contributed to increased consultation, and it is estimated that 90% of these individuals are involved in mental health consultation. Also, out of a selected total case load of 730 confirmed alcoholics in 1969, more than half were reported to be involved in active counseling sessions at either mental health clinics, alcoholic rehabilitation centers, or service agencies.

Corrections

Perhaps the role of the psychiatrist relative to the individual law violator is nowhere better defined in the criminal process than in the Department of Corrections, to which an individual is assigned after an active sentence has been imposed. Here diagnostic, treatment, and even commitment responsibilities more closely approximate the traditional functions of psychiatrists outside the criminal area. Perhaps the most

striking departures from traditional practice center on the milieu of the inmate, the limitation of supportive resources, and the involuntary features of the doctor-patient relationship. Less well-defined has been the role of the psychiatrist in Corrections beyond his relationship with the individual inmate, such as in the areas of research, planning, policy making, administration, and personnel training. Contributing to inertia here is perhaps a feeling on the part of many that the goals of mental health services and effective custody may not be compatible.

The precise number of those admitted to prison in North Carolina in 1969 who came under psychiatric scrutiny is not known, perhaps surprisingly, since not all referrals are handled in a formal, routine manner and are not centralized to the extent of some other activities of the inmate. Psychiatric services are dispersed, however, from a central mental health clinic facility and staff at Central Prison in Raleigh. As of July 1, 1970, the full-time psychiatric staff consisted of three physicians. Another eight psychiatrists were employed on a part-time basis. A number of psychologists, counselors, and nurses round out a staff which handled approximately 800 formal referrals to the Central Prison Mental Health Clinic from adult correctional units around the state. Approximately 200 additional referrals from the population of youthful offenders were seen by staff members at units designated for youth.

The North Carolina Department of Corrections has responsibility for a population base of approximately 10,000, including some 2,000 minors and 400 females. New admissions in very recent years have reflected a relatively stable figure, after a decrease in admissions coincided with revision of laws for the sentencing of alcoholics. The latter are now generally incarcerated for longer periods of time, with fewer number of total admissions for repeat offenses.

In addition to performing psychiatric examinations on the pre-sentence diagnostic cases described above, psychiatrists in the Department of Corrections as a matter of policy routinely examine certain inmates on

admission. These include individuals convicted of "capital crimes" (e.g., murder, rape, armed robbery, and arson), those under sentence of life imprisonment or the death penalty, those convicted of sexual offenses (such as incest and rape), and convicted offenders under the age of 16. Also seen routinely are those for whom the sentencing court recommends psychiatric examination. The desirability of additional routine evaluations may be obvious but is offset by the limited availability of psychiatric staff.

A substantial portion of psychiatric diagnostic and treatment services are concerned with the offender who develops signs or symptoms of significant mental or emotional disturbance during incarceration. Services rendered vary to some extent with needs; however, psychopharmacotherapy and brief psychotherapy are more readily available than prolonged individual psychotherapy. Group therapy has been used more extensively recently. Of much importance, of course, in meeting the mental health needs of inmates is the treatment carried out by mental health clinic staff members other than psychiatrists.

Where management in the form of more specialized hospitalization is felt to be indicated, the inmate is committed to either of the state's two forensic units, as provided in G. S. 122-85:

All convicts becoming mentally ill after commitment to any penal institution in this state shall be admitted to the hospital designated in General Statute 122-83. The same hospitalization procedure . . . (as for judicial hospitalization) . . . shall be followed except that temporary authority for admission of the convict may be given by the clerk of court of the county in which the person is located, that the prisoner need not be removed from the prison for a hearing, and that the clerk of court of the county from which the convict was sentenced shall issue the order of hospitalization.

If recovery is achieved prior to expiration of the sentence, the patient is returned to the Central Prison Mental Health Clinic for follow-up care. In the event the sentence of any convicted mentally ill person expires while he is confined in the state hospital, transfer or discharge is handled in the same

manner as is judicial hospitalization. During 1969, 180 inmates within the Department of Corrections were committed under G. S. 122-85. Seventy-two of these were admitted to the Forensic Unit at Dorothea Dix Hospital and 108 were admitted to the Forensic Unit at Cherry Hospital.

Classification (for custody grade, location, and activities) of inmates, not a primary responsibility of psychiatrists, has utilized consultation services on an increasingly frequent basis. Under the leadership of the present Commissioner of Corrections, some degree of participation by psychiatrists in virtually all of the correctional activities has been accomplished. A pinnacle of this role expansion was reached in August, 1969, when a psychiatrist was named one of the two deputy state correction commissioners. In recent years the Central Prison Mental Health Clinic has steadily expanded in staff size and in the extent and variety of services rendered. Construction of a 100-bed mental health facility within the confines of Central Prison is presently under way. Recently, a clinical psychologist assumed the position of superintendent of Central Prison in another innovative move.

Parole

A final step in the criminal process brings the psychiatric consultant into contact with an inmate under consideration for parole or with the parolee himself. In North Carolina the Board of Paroles is a separately administered governmental body which has responsibility for parole investigation and decision. In 1969 almost 13,000 inmates were reviewed for parole, and of this number just over 2,000 were granted parole. It is reported that 75% of those selected successfully terminate parole status, while 25% have parole revocations. The ultimate rate of recidivism among parolees may run considerably higher, however.

The Parole Board considers many factors in arriving at a decision. Psychiatric evaluations which assess mental status, "dangerousness," parole advisability in general, and other more specific issues surrounding the prospective parolee, are weighed with other factors such as the nature and circum-

stances of the crime leading to conviction, previous criminal and court records, length of time served, conduct and attitude in prison, and community reaction to return. The Board is invested with statutory authority to revoke, at any time, a parole previously granted. Psychiatric consultation prior to revocation of parole is occasionally obtained and is frequent following a revocation. Should the parolee need psychiatric evaluation and treatment while on parole, services of private practitioners and local mental health clinics are utilized, and if indicated, judicial hospitalization may be carried out in the manner provided by law elsewhere. Psychiatric treatment in some cases may be established as a condition of parole.

Nearly all psychiatric evaluations of prospective parolees are performed by staff members of the Mental Health Clinic of the Department of Corrections, upon referral to the Clinic by investigators or members of the Board of Paroles. It is estimated that presently 10% of all inmates being considered for parole receive psychiatric evaluation in connection with their review. An even larger number may have had psychiatric contact in the past, unrelated to parole consideration. The number of formal referrals has steadily increased in recent years. Presently almost all felonious sex offenses as well as many cases in which there is expressed opposition to parole receive psychiatric evaluation. If available psychiatric services were less limited, many additional referrals from the Board of Paroles would undoubtedly be made.

Discussion and Summary

The future role of psychiatrists in judicial and correctional activities in North Carolina will undoubtedly be influenced by developments on a local as well as a national level. Despite some notable opposition, the trend toward greater involvement appears clear on both levels, although its course remains uncertain. Diagnostic and treatment services of psychiatrists seem to be especially well established in the criminal law process. For instance, data above indicate that the number of pre-trial and pre-sentence evaluations has shown steady increases on the

state level, reflecting an earlier accurate prediction by Keith¹² for federal courts, and it is clear that the affiliation of psychiatry and corrections has become particularly strong on both levels. The area of trial testimony and determination of criminal responsibility still draws the greatest controversy and is likely to continue to do so.

In general, psychiatrists have found their work in the courts and correctional institutions to have attractive and unattractive features. It is clear that the needs for basic services are great, and steady upgrading of working conditions and salaries have resulted in recent years. In addition to the challenge presented for diagnostic and treatment skills, special interests such as teaching and research can be readily pursued. Physicians who work with the courts, though, have often complained of harassment by lawyers and interruption of schedules through subpoenas. Of particular concern has been the administrative "use" of the physician, and especially the psychiatrist, as a "rubber stamp" in providing additional sanction to questionable actions. Further evolution of roles for the psychiatrist will undoubtedly have to take into account these and other factors. In this process, mental health personnel should participate actively, exercising a discreet initiative lest the imperturbable and seduced rush in where wiser men tread cautiously. Psychiatrists in particular should seek to direct their special skills and experience toward the solution of recognized, carefully delineated problems rather than to command a haphazard entry into areas in which they have little special competence. Despite a fundamental commitment to treatment, psychiatrists do not possess the only tools or sufficient manpower to provide the needed services. This fact alone should presage a significant commitment to research and training in the future, and in any event, it is clear that mental health personnel must mobilize all existing resources and constantly attempt to recruit additional ones.

In North Carolina the climate should become increasingly more favorable for joint endeavors of the courts, the Department of

Corrections, and psychiatry. Although a proposed federal facility inspiring some enthusiasm a number of years back has yet to materialize, much activity is occurring within the state bodies as the above data attest. A uniform court system and a centrally organized correctional system have provided unique organizational structures which aid diagnostic, treatment and research efforts. Sample populations are readily available for study of virtually any physical or mental disorders, socioeconomic class or crime. A vigorous and progressive Commissioner of Corrections is focusing much needed public attention on problems in this area, and has evidenced a commitment to work closely with mental health personnel.

Several proposals which have been considered would appear to have particular merit for mental health purposes in this state. Handling many of the increasing number of pre-trial and possibly pre-sentence evaluations at the community level, with follow-through cooperation between the physician and the court where trial testimony is needed, would seem to benefit both. It is foreseeable that increased use of pre-trial observations could accompany a decrease in personal court appearances, especially where studies and reports would more directly serve the needs of the courts. The bringing together of Probations, Parole and Corrections into a single administrative body would permit more efficient use of available personnel on mental health staffs and among career state employees, more consistent handling of the offender, and more productive economical long-range planning and investigations. Paralleling efforts to achieve a comprehensive health evaluation of each offender should be a reconsideration of state laws consistent with the greater emphasis on rehabilitation.

In any event, future extension of present psychiatric roles in the criminal process will likely reflect, as in the past, the views of administrators, availability of psychiatric resources, public concern, development of new programs, changes in existing laws, and the receptivity of psychiatrists to new or altered role opportunities. Considerable ac-

tivity in all branches of the federal government has had a broad impact in many of these areas, suggesting that events on a national level will be more determinative of the course followed in the future in North Carolina than will primarily "local" events. However, resources and recent developments in the state, such as those noted above, indicate considerable potential on the local level alone for narrowing the gap between what is theoretically sound and desirable and what is actually accomplished.

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Evaluation of the Patient with Lymphoma Including Diagnostic Laparotomy

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The last ten years have seen numerous advances in the study and treatment of lymphomas. These advances include clarification of the pathologic classification of lymphomas;^{1,2} the general availability of megavoltage radiation sources and accompanying technical support systems that allow a more aggressive radiotherapeutic approach;³ improvements in our ability to detect previously occult disease in the abdomen,^{4,5} and a great deal of information about the natural history of the various lymphomas.⁶ Tables 1 and 2 contain the staging system and pathologic classification used in this report.

The diagnostic laparotomy has become an extremely valuable aid in the evaluation of lymphomas during the past two years.^{7,8}

and it is the purpose of this paper to review the procedures necessary to adequately evaluate a patient with lymphoma and summarize our findings in 24 patients submitted to diagnostic laparotomy prior to radiation therapy.

General Evaluation

Adequate pathologic material must be obtained to establish the diagnosis in this difficult disease category. The entire lymph node should be removed, and if multiple nodes are readily available, several can be removed for examination. A radical node dissection is almost never indicated. The pathologist should be notified when lymphoma is suspected, as he may wish to make touch preparations, and the nodes should usually be sectioned prior to fixation to assure adequate technical material. When one has a choice, the lymph node excised should not be from areas subject to chronic inflammatory changes such as inguinal-femoral

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lymph nodes and axilla.

Table 1

Clinical Staging^{1,2} of Lymphoma

- I Disease limited to one lymph node group
- II Involvement of more than one lymph node group on one side of the diaphragm
- III Lymph node involvement on both sides of the diaphragm
- IV Extra-nodal involvement e.g., bone marrow, pulmonary parenchyma or liver
 - 1) The spleen is considered a lymph node
 - 2) All stages are subclassified A or B
 - A—no systemic symptoms
 - B—fever or night sweats or generalized pruritus

Table 2

Pathologic Classification of Lymphoma

Hodgkin's Disease	Other Types of Lymphoma
Lymphocyte predominance	Lymphocyt, well differentiated
Mixed cellularity	Lymphocyt, poorly differentiated
Nodular sclerosis	Stem cell
Lymphocyte depletion	Histiocytic

The importance of a careful history and physical examination by an examiner experienced in evaluating lymph node pathology cannot be over estimated. Particular attention must be paid to the presence or absence of systemic symptoms, as these are most important determiners of prognosis. Between 1952 and 1968, 144 cases of Hodgkin's disease were seen at North Carolina Memorial Hospital. The five-year survival rate of patients free of systemic symptoms was approximately three times the rate of those who presented with fever, night sweats, or pruritus.

Basic laboratory and x-ray studies, including peripheral blood count, urine analysis, evaluation of renal and liver function, chest films, and an intravenous pyelogram must be obtained to screen the several organ systems that may be secondarily involved by lymphoma.

Bone Marrow Examination

A bone marrow biopsy is necessary in Hodgkin's disease, and it appears that a bone biopsy and an aspirate are necessary in other lymphomas.^{9,10} Table 3 tabulates information obtained from the literature re-

lated to these two procedures in cases of lymphoma, and clearly indicates that a bone marrow aspirate alone is inadequate for either group of lymphomas.

Table 3

Results of Bone Marrow Examination

	Total No. Patients	Positive Aspirate	Positive Biopsy	Total No. Positive Cases
Hodgkin's disease				
Rosenberg ⁹	20	1	10	11
Grann et al. ¹⁰	42	0	11	11
Non-Hodgkin's lymphoma ¹⁰				
Lymphosarcoma	23	13	12	18
Reticulum-cell sarcoma	16	0	1	1

Lymphangiography

Lymphangiography is necessary in almost all new patients with the diagnosis of lymphoma. Several authors have reported a 45% incidence of unrecognized para-aortic lymph node involvement in patients with Hodgkin's disease clinically limited above the diaphragm.^{9,11} Our experience over the past 15 months has confirmed this observation with 6 of 20 patients demonstrating involvement of the para-aortic lymph nodes that was not clinically suspected (Table 4).

Table 4

Clinical Involvement Only Above Diaphragm Proven Positive Lymphangiogram

Hodgkin's disease	10	4
Other lymphomas	10	2
Totals	20	6 (30%)

The lymphangiogram has several other uses, Figure 1 A and B illustrates the sustained regression of involved lymph nodes that may be observed by follow-up KUB examinations as long as one or two years after radiation therapy. In addition, those follow-up studies can help us to detect early involvement of previously uninvolved para-aortic lymph nodes. The residual dye can be observed to expand with early involvement of these nodes at a time when the physical examination and intravenous urogram are normal.

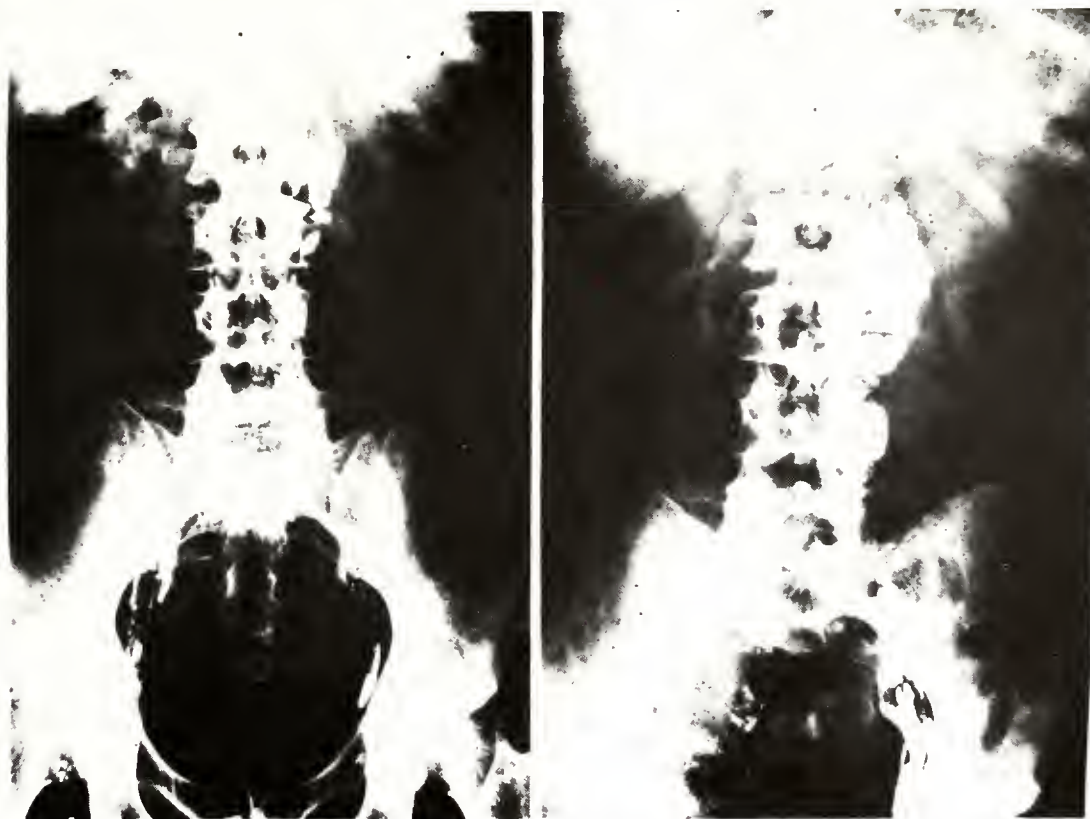


Fig. 1. A (left). The 24-hour lymphangiogram reveals massive right pelvic and para-aortic lymphadenopathy prior to treatment. B (right). The follow-up KUB study demonstrates complete regression seven months later.

Miscellaneous Special Studies

Tomograms of the mediastinum, hila, and lungs are necessary in the presence of mediastinal disease, as the route of entry into the lung appears to be through the hilar lymph nodes. When these nodes are involved in Hodgkin's disease, we feel it is necessary to extend the prophylactic irradiation to include 1200 rads delivered to all of both lungs.

The liver scan and closed needle biopsy of the liver have not correlated well with open liver biopsy findings in our experience, but as yet the data are insufficient to prove that these studies are not worth while.

Diagnostic Laparotomy

The most recent contribution to the management of lymphomas has been an awareness of the value of a diagnostic laparotomy. Since Hodgkin's disease and many non-Hodgkin's lymphomas may be curatively treated by radiation, we have a major ob-

ligation to identify the patients who are candidates for this therapy.

At the time of surgery a splenectomy is performed, biopsies of the para-aortic and coeliac lymph nodes and a wedge of the liver are obtained, and abnormal areas within the liver are sampled by needle biopsy. The removal of the spleen avoids radiation damage to a portion of the lung and a portion of the left kidney, and does not interfere with subsequent chemotherapy.

The lymphangiogram remains necessary despite the exploratory laparotomy, as the surgeon frequently needs the contrast study to direct him to suspected lymph nodes to remove for pathologic examination.

The results of diagnostic laparotomy in 14 patients with Hodgkin's disease and 10 patients with lymphoma other than Hodgkin's disease are summarized in Table 5. This table indicates that the para-aortic lymph nodes are reasonably well evaluated by

lymphangiography, with a 4% error in our experience. The clinical evaluation of the spleen and liver is poor: regarding these critical organs, we have observed a 13% to 17% incidence of error. The importance of correctly identifying the patients with liver disease cannot be overstressed, as this diagnosis requires a shift in approach from radiation therapy to chemotherapy. Patients

of the internal medical or pediatric specialist, the radiation therapist, the diagnostic radiologist, and now the surgeon. Through such an effort we may not only advance our knowledge about this group of diseases, but improve our methods and results of treatment.

Table 5

Error in Clinical Evaluation Demonstrated
By Diagnostic Laparotomy*

	Lymphangiogram	Spleen	Liver
Hodgkin's disease	1/14	3/14	3/14
Other lymphomas	0/9	0/9	1/9
Combined error	1/23 (4%)	3/23 (13%)	4/23 (17%)

*Number of erroneous clinical diagnoses per total number patients examined

with involvement of the spleen in Hodgkin's disease are still candidates for radical radiation therapy, but we must identify this disease in order to properly direct the treatment.

The value of celiotomy for staging lymphomas other than Hodgkin's disease is not yet as well established as in Hodgkin's disease. However, our experience does suggest that this procedure will be equally useful in many cases.

Summary

The management of lymphomas is becoming more of a cooperative interdisciplinary effort that must include the active partici-

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Those troubled with costiveness, ought, if possible, to remedy it by diet, as the constant use of medicines for that purpose is attended with many inconveniences, and often with bad consequences. I never knew any one who got into a habit of taking medicines for keeping the body open, who could leave it off. In time, the custom becomes necessary, and generally ends in a total relaxation of the bowels, indigestion, loss of appetite, wasting of the strength, and death.—William Buchan: Domestic Medicine, or a Treatise on the Prevention and Cure of Diseases by Regimen and Simple Medicines, etc., Philadelphia, Richard Folwell, 1799, p 292.

Hydatidiform Mole Coexisting with a Fetus

Report of a Case with Associated Eclampsia at Nineteen Weeks' Gestation

PAUL GREEN, JR., M.D.

The purpose of this paper is to call attention to: (1) the coexistence of hydatidiform mole with a fetus; (2) the occurrence of sudden and fulminating toxemia in early pregnancy in the presence of molar tissue, and (3) the possibility of confusion in the differential diagnosis of toxemia and trophoblastic disease.

Artius first recorded a description of this interesting tumor in 1534, as follows: "The uterus becomes filled with humor and small bladder-like bodies are developed in the fluid. With this the abdomen becomes swollen and the patient has a slow walk and breathes with difficulty."

Many early physicians felt that the vesicles were unfertilized ova, or that they represented an embryo. Ambrose Pare related an interesting story about the Countess Margaret of Flanders, who delivered 365 infants at one time. One hundred eighty-two were christened John, 182 Elizabeth, and the odd one was judged an hermaphrodite after much clerical debate and was buried in unconsecrated ground.

Astruc, in 1750, became the first to use the term "hydatid mole" and to correctly state its origin.¹

Case Report

A 24-year-old Negro married woman, para 2, was first seen on Oct. 29, 1969 at 11 weeks' gestation.

Past history

Her first pregnancy had ended in an early incomplete abortion in December 1966.

The second pregnancy terminated at 41 weeks in a frank breech delivery after 10 hours of labor, but the infant died after 12 hours of respiratory distress. No congenital malformations were noted.

Five days later the patient was readmitted with lower abdominal pain and vaginal bleeding, and a partially extruded submucous myoma measuring 10

by 7.5 cm and weighing 300 gm, was removed trans-abdominally.

Present illness

The early prenatal course was uncomplicated except for a blood pressure of 136/70 and proteinuria (1 plus), with 7 to 10 white blood cells in a voided urine specimen obtained at 16 weeks' gestation. She was given sulfisoxazole and later nitrofurantoin.

The patient was next seen at 19 weeks' gestation. She was brought to the emergency room by her husband, who had found her unconscious, incontinent of feces and urine, and bleeding from a laceration of the lower lip.

She had noted swelling of the face, hands and legs, and amber-colored urine for several days prior to admission.

Physical examination

The temperature, pulse and respiration were normal, but the blood pressure was 170/120. The patient was mentally confused. Marked facial edema and 2 plus pitting edema of lower extremities was evident, as was a swollen, lacerated lower lip. Fundoscopic examination revealed narrowing of the arterioles and well outlined discs. Deep tendon reflexes were hyperactive.

The uterus measured 22 cm above the symphysis, just slightly above the umbilicus, and was thought to be compatible with an 18 to 20 weeks' gestation. The fetal heart could be heard with the ultrasonic Doppler.

Laboratory studies disclosed the following values: hemoglobin 11.1 gm/100 ml, white blood cell count (WBC) 17,000, blood urea nitrogen 13.0 mg/100 ml, serum uric acid 12.8 mg/100, total protein 4.2 gm/100 ml (albumin 0.8 gm, globulin 3.5 gm per 100 ml—a ratio of 0.2:1). Urinalysis (voided specimen) revealed a specific gravity of 1.004, 4 to 6 white blood cells, proteinuria (4 plus), no red blood cells, no casts, and no sugar.

A serologic test for syphilis was negative. The blood was found to be type O Rh positive. The ASO titer was 100 units. The blood volume was 1000 ml above normal and the plasma volume was 1300 ml above normal. Serum and urine osmolality were normal. The protein bound iodine was 4.2 micrograms/100 ml. The total serum complement was normal.

Course in the hospital

Following admission the urine was intermittently much darker in color and microscopically revealed showers of red blood cells. Oliguria was followed

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Reprint requests to 102 Mocksville Avenue, Salisbury, N. C. 28144.

in three days by diuresis.

Initial treatment consisted of sedation and magnesium sulfate.

Medical consultation was obtained and a diagnosis of acute glomerulonephritis was made. Gradually the therapy was shifted to antihypertensive drugs.

The urine continued to show proteinuria (3 plus) and 10 to 20 WBC's, rare RBC's and 1 to 5 finely granular casts. The total serum protein was 4 gm with a 1:1 ratio.

A flat film of the abdomen obtained shortly before discharge showed a fetus smaller than would be expected from the size of the uterus.

The fetal heart was not heard following admission.

The patient was discharged on a regimen of reserpine, hydralazine hydrochloride, and hydrochlorothiazide. The diagnosis was: 1) acute glomerulonephritis with encephalopathy; 2) pregnancy with intrauterine death at 19 to 20 weeks.

The patient was seen in the office at weekly intervals with good control of blood pressure (120/70), proteinuria (1+) and a normal serum fibrinogen level.

Second admission

Four weeks following discharge the patient was readmitted because of vaginal bleeding and lower abdominal pain.

The blood pressure was 150/90. Shortly after admission a macerated male fetus measuring 15 cm from crown to heel was aborted, followed one hour later by expulsion of a placental mass. A fractional dilatation and curettage was performed the following morning.

Pathology

On gross examination both our pathologist and the AFIP agreed that the tissue represented a hydatidiform mole. No separate placenta was found to suggest a twin pregnancy.

Microscopically, the diagnosis was difficult to substantiate, but there was moderate proliferation of the trophoblastic layer, cystic degeneration of the central portion of the largest villi, and decreased vascularity. No Barr bodies could be found.

The fetus had a central bilobate cyclops eye above the bridge of the nose, but dissection was not done.

Follow-up laboratory work revealed a BUN of 11 mg/100 ml; uric acid, 6.9 mg/100 ml; creatinine, 0.9 mg/100 ml; and creatinine clearance, 142 ml/minute. A catheterized urine specimen contained no protein, 1-2 WBC, no RBC, and no casts.

Subsequent course

Urinary chorionic gonadotropin reaction was negative at 4 weeks, normal menses have resumed and the uterus is normal in size. No ovarian masses were felt at any time during the course of pregnancy or later.

Discussion

The incidence of hydatidiform mole varies

between 1 among 2500 pregnancies in the United States to a high of 1:173 in the Philippines.² In this country the incidence of a coexisting fetus is about 5% of all molar pregnancies, or about 1 in 50,000 pregnancies.^{3,4}

Beischer abstracted from the literature 82 cases of mole with coexisting fetus of which 52 were associated with a single placenta and the other 30 were dizygotic.⁵

Acute glomerulonephritis in pregnancy is much less common. Nadler,³ in a review of the world literature, found only 19 cases associated with pregnancy, and only 2 of these had been confirmed by renal biopsy. He reported one case, but had found no others during four years at Michael Reese Hospital, nor in 15,000 deliveries at the Sloane Hospital.

Acosta-Sison¹ reported the incidence of toxemia, indicated by an elevated blood pressure, in 37% of 85 molar pregnancies. Only one third of the patients with an elevated blood pressure had proteinuria, cylindruria, or hematuria, and only three patients had edema.

Etiology

The etiology of hydatidiform mole remains unknown. Acosta-Sison and others proposed an insufficient dietary intake of protein as a factor, but this was apparently refuted by a detailed dietary history in MacGregor's study of 145 molar pregnancies, where no correlation was found.²

Baggish and Jones⁵ proposed that a mole may result from the endoreduplication of the haploid cells of the polar body of the secondary oocyte.

The etiology of toxemia in molar pregnancies is also obscure, as it is in normal pregnancy. Acosta-Sison proposed that the hypertension is due to a combination of factors; namely, a high titer of chorionic gonadotropin, increased intra-abdominal pressure, and a distended ischemic uterus. Hypertension was present in all of the patients when the uterus was at or above the level of the umbilicus; but there was no correlation between hypertension and the length of amenorrhea.¹

Diagnosis

The signs and symptoms of hydatidiform mole are too well known to be detailed, but perhaps the following points are worth noting.

1. Bleeding, pain, or passage of molar tissue may not be present. (In MacGregor's 145 patients, none passed tissue or had pain and 85% had only slight bleeding.)

2. MacGregor also judged the size of the uterus to be consistent with or smaller than the gestational age in 61% of the patients, and judged the uterus to be of normal consistency in the same percentage.

3. The presence of a fetal skeleton does not exclude a molar component to the pregnancy.

The differential diagnosis of hydatidiform mole with toxemia and acute glomerulonephritis would seem to hinge on an elevated or rising ASO titer, although in acute nephritis, the titer may be no more than 100. The serum complement should also be low in glomerulonephritis, owing to binding with antigen antibody complexes.⁶ Renal biopsy will differentiate the swelling of intracapillary and visceral epithelial cells of the glomerulus in toxemia from the proliferative and exudative glomerular lesions of acute nephritis.³

Cecil's Textbook of Medicine:

Severe headache, nausea and vomiting, somnolence, mental confusion and finally generalized clonic convulsions may be associated with a rapid rise in B.P., in part due to cerebral ischemia. Narrowed arteries are not uncommon when hypertension is severe. Urine volume may be normal or may decrease abruptly, hematuria is almost invariably present as is proteinuria, and casts of all varieties may be seen.⁷

This passage could well pass for a description of toxemia.

Pathology

The gross and microscopic characteristics of the benign hydatidiform mole are well known, the cardinal features being edema of the stroma, scantiness of blood vessels, and trophoblastic proliferation without invasion.⁸

Cytogenetics

Both Baggish⁹ and Beischer³ report, from their own series and reviews of the literature, the predominance of chromatin posi-

tive cells from both placental and fetal tissues, in ratios ranging from 3:1 to 18:1. The reason for this female dominance is obscure, but Baggish and Jones suggest that the previously described endo-reduplication of the secondary polar body may be an explanation.

Cytogenetic studies of moles reveal a high incidence of fetal and chromosomal anomalies, the most common being triploidy, which Carr¹⁰ reported in 9 out of 13 cases. He also noted that 6 of the 13 specimens came from women who had recently discontinued oral contraception.¹⁰ When a single molar placenta is associated with a fetus, the latter is often abnormal, with central nervous system defects being common.⁹

Summary

A case of hydatidiform mole coexisting with a fetus which had at least one defect of the central nervous system. A single placental molar mass suggests a monozygotic pregnancy. The fetus appeared to be a male and Barr bodies were not found. The presence of toxemia posed a problem in the differential diagnosis with acute glomerulonephritis. Some of the literature on these three aspects of disease was reviewed, and brief mention was made of the recent studies of cytogenetics in molar pregnancy.

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TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
AUGUST 1970 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NON WHITE					COUNTY	WHITE					NON WHITE				
	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	August 1970	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths		Total Deliveries	Perinatal Rate Per 1,000 Deliveries				
	August 1970	September 1969- August 1970				August 1970	September 1969- August 1970			August 1970				September 1969- August 1970	August 1970			September 1969- August 1970			
NORTH CAROLINA	182	1996	69143	28.9	119	1366	28611	47.4													
ALAMANCE	1	30	1290	23.3	3	22	453	48.8	PENDER		4	125	-		4	165	-				
ALEXANDER		15	364	41.2		1	34	-	PERQUIMANS			76	-			53	-				
ALLEGHANY	1	4	142	-				-	PERSON	1	9	297	30.3	2	12	201	38.7				
ANSON		3	170	-	1	24	302	79.5	PITT	2	25	756	33.1	5	39	662	48.9				
ASHE		9	322	28.0			3	-	POLK		4	111	-		4	47	-				
AVERY	1	7	189	37.0			2	-	RANDOLPH	3	35	1280	27.3		2	136	-				
BEAUFORT		9	404	22.3		11	257	42.8	RICHMOND	2	27	514	52.5		302	29.6					
BERTIE		5	115	43.5	1	12	241	49.8	ROBESON	2	28	622	45.0	8	55	1597	74.4				
BLOOM	1	5	256	19.5	1	11	220	50.0	ROCKINGHAM	3	31	1000	31.0	3	25	393	63.6				
BRUNSWICK		10	296	33.8	1	4	152	-	ROWAN	4	32	1189	26.9		12	298	40.3				
BUNCOMBE	7	61	2136	28.6		18	278	64.7	RUTHERFORD		20	693	28.9		6	152	30.5				
BURKE	2	29	927	31.3	2	5	90	-	SAMPSON		7	413	18.9	1	18	312	57.7				
CABARRUS	6	29	1060	27.4		11	301	36.5	SCOTLAND	2	12	318	37.7	1	11	287	38.3				
CADWELL	4	40	1135	35.2		5	106	47.2	STANLY	2	15	587	25.6		4	129	-				
CAMDEN		2	50	-		1	34	-	STOKES	1	10	365	27.4			48	-				
CARTERET	1	16	487	32.9		3	91	-	SURRY	3	30	912	32.9		5	63	-				
CASWELL	1	3	152	-		8	178	44.9	SWAIN		3	84	-	1	1	74	-				
CATAWBA	7	51	1566	32.8		8	236	33.9	TRANSYLVANIA	1	13	303	42.9		2	23	-				
CHATHAM		5	337	14.9	2	10	177	66.5	TYRRELL		1	32	-		1	1	33	-			
CHEROKEE	3	11	292	37.7		2	16	-	UNION		22	747	29.5	2	12	322	77.3				
CHOWAN		1	107	-		3	101	-	VANCE		3	289	-		2	14	344	10.7			
CLAY		8	84	-			1	-	WAKE	4	60	3116	19.3	2	49	1134	43.2				
CLEVELAND	6	32	1013	31.6	2	28	454	61.7	WARREN	1	4	62	-	2	10	155	64.5				
COLUMBUS	6	19	521	36.5	6	23	324	71.0	WASHINGTON		1	154	-		4	141	-				
CRAVEN	4	32	1210	26.4	1	13	394	33.0	WATAUGA	1	13	399	32.6			5	-				
CUMBERLAND	8	109	3838	28.4	6	62	1455	42.6	WAYNE	5	39	1162	33.6		34	614	55.4				
CURRITUCK	1	1	57	-		1	31	-	WILKES	3	32	858	37.3		1	2	56	-			
DARE		2	103	-				-	WILSON	1	25	579	43.2	2	26	574	46.3				
DAVIDSON	2	40	1503	26.6	1	15	256	58.6	YADKIN		7	363	19.3		5	33	-				
DAVIE	2	7	278	25.2	1	5	66	-	YANCEY	2	6	188	31.9			3	-				
DUPLIN	2	10	415	24.1	2	14	306	45.8													
DURHAM	6	41	1533	26.7	2	52	982	53.0	CITIES												
EDGECOMBE	9	432	20.8	3	24	592	40.5	ALBEMARLE	2	1	127	-		1	50	-					
FORSYTH	5	84	2747	30.6	6	56	1141	49.1	ASHEVILLE		17	674	25.2		16	238	67.2				
FRANKLIN		6	195	30.8	2	15	242	62.0	BURLINGTON		12	529	22.7	3	12	141	85.1				
GASTON	7	74	2561	28.9		23	506	45.5	CHAPEL HILL		7	333	21.0		3	71	-				
GATES		2	56	-	1	8	88	-	CHARLOTTE	9	80	3183	26.1	6	82	2079	39.4				
GRAHAM		2	121	-			13	-	CONCORD	1	8	219	36.5		5	119	42.0				
GRANVILLE		6	251	23.9	1	16	336	47.6	DURHAM	5	28	943	29.7	2	48	857	56.0				
GREENE		4	104	-		8	144	55.6	EDGE	1	7	237	29.5		1	59	-				
GUILFORD	9	97	3846	25.2	9	88	1646	53.5	ELIZABETH CITY		2	146	-			102	-				
HALIFAX	2	11	389	28.3	4	32	606	52.8	FAYETTEVILLE	3	35	963	36.3	5	34	612	55.6				
HARNETT	1	21	570	36.8	2	16	349	45.8	GASTONIA	4	28	795	35.2		10	228	43.9				
HAYWOOD	1	28	636	44.0			11	-	GOLDSBORO	4	20	372	53.8		12	263	46.6				
HENDERSON	1	18	626	28.8		2	45	-	GREENSBORO	5	52	1867	27.9	6	57	977	58.3				
HERTFORD		11	131	84.0	3	16	263	80.8	GREENVILLE	2	12	324	37.0	3	14	188	74.5				
Hoke		4	112	-	1	4	252	-	HENDERSON		1	119	-		1	8	134	59.7			
HYDE		3	40	-		3	47	-	HICKORY	3	18	360	50.0		4	110	-				
IREDELL	2	28	1026	27.3	3	16	355	45.1	HIGH POINT		14	826	26.9	1	23	464	49.6				
JACKSON	2	9	285	31.6		1	55	-	JACKSONVILLE	1	12	435	27.6		2	74	-				
JOHNSTON	7	29	772	37.6	1	19	329	57.8	KINSTON	1	10	286	35.0		9	228	39.5				
JONES		3	87	-		5	79	-	LENOIR		7	225	31.1		3	53	-				
LEE	1	10	414	24.2		4	163	-	LEXINGTON		9	260	34.6		4	95	-				
LENOIR	1	20	598	33.4	19	417	45.6	LUMBERTON		6	200	30.0		9	217	41.5					
LINCOLN	3	16	542	29.5		8	96	-	MONROE		4	140	-		1	5	95	-			
MCDOWELL	3	21	534	39.3	1	4	42	-	NEW BERN		6	163	36.8		4	126	-				
MACON		4	234	-			4	-	RALEIGH	2	29	1632	17.8	1	30	587	51.1				
MADISON		13	237	54.9			2	-	REIDSVILLE		2	167	-		4	96	-				
MARTIN		4	204	-	1	13	260	50.0	ROANOKE RAPIDS	1	7	177	39.5		2	33	-				
MECKLENBURG	11	120	4938	24.3	6	98	2386	41.1	ROCKY MOUNT E		3	126	33.9		10	162	50.4				
MITCHELL		5	201	24.9			1	-	ROCKY MOUNT N		6	251	36.0		3	96	34.7				
MONTGOMERY	1	9	250	36.0	1	11	121	90.9	SALISBURY		8	222	-		5	144	-				
MOORE	2	27	480	56.3		14	248	56.5	SANFORD		4	173	-		1	70	-				
NASH	4	15	617	24.3	1	28	524	53.4	SHELBY	2	7	180	38.9		7	133	52.6				
NEW HANOVER	1	34	1289	26.4	2	19	372	51.1	STATESVILLE		6	245	24.5		8	150	53.3				
NORTHAMPTON		1	100	-	2	11	284	38.7	THOMASVILLE		4	206	-		1	6	96	-			
ONSLow	2	50	2339	21.4	4	22	439	50.1	WILMINGTON		13	658	19.8	2	15	325	46.2				
ORANGE	1	26	857	30.3		8	225	35.6	WILSON		12	309	38.8	2	9	262	34.4				
PAMLICO		2	102	-		2	59	-	WINSTON SALEM	5	50	1411	35.4	6	52	1087	47.8				
PASQUOTANK		6	284	21.1		2	164	-													

¹ Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

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NOVEMBER, 1970

THE FALL COUNCIL MEETING

By the proverbial "sweat of the brow," the Annual Conclave of Committees, meeting at Mid Pines in late September, ground out 50 committee reports for submission to the Executive Council in session on the final day. Not until the very moment the Council adjourned did the record breaking heat begin to moderate.

The Council meeting was initiated by a report from the Auxiliary president outlining a program operating under the slogan "Informed and Active." Projects include a contribution of \$5,000 to the AMA-ERF, outstanding student loans of \$16,000, and a fund of \$42,000 in support of four

Sanatorium beds. Other activities include the furnishing of a room to be assigned the Auxiliary in the new headquarters building.

A balanced but tight budget for 1971 was approved as presented by the Finance Committee. Due to limited funds, the planned employment of a second field representative was deferred. The Council also ruled that reimbursed expenses of officers, councilors, and commissioners will be limited to room, board, and travel costs incurred on society business.

A report on the progress of the new headquarters building indicated anticipated completion early in 1971. The Council authorized renewal of a contract with a Raleigh real estate firm for the sale of the Durham highway property in anticipation of the need for liquid assets to support the building program. Tenants will be sought for the remaining open space on the second floor of the building.

The Council determined that periodic survey by a management firm consultant will be continued. A Headquarters and Personnel Committee has been appointed to act in a consultative capacity to the Executive Director on matters pertinent to the operation of the headquarters office.

The Council received a report emanating from the Commission on Reorganization of State Government and a Task Force Subcommittee of the Comprehensive Health Planning Commission concerned with a possible move to consolidate all licensing boards under a single administrative agency of state government. The Council approved a recommendation from the Committee on Planning, supported by the Committee on Legislation and the Committee on the Association of Professions, that a liaison council be created representing all health related licensure boards to develop readily available and retrievable resource data, and that the Board of Medical Examiners be urged to exert leadership in activating this council.

Other areas of possible legislative activity in the next General Assembly suggested by the Committee on Legislation were certification of medical assistants, additional state supplements for nursing education, support

for the implementation of a driver training and research program to be established in the Research Triangle, possible amendments to the Medicaid law, and state aid for a chronic renal disease program. In addition, a proposal to explore the use of unoccupied beds in state sanatoria for limited categories of patient care under the auspices of the UNC School of Medicine was endorsed by the Council.

Upon recommendation of the Committee on Utilization, the Council authorized the appointment of an ad hoc committee on peer review to include the chairmen of the several committees currently concerned with utilization and review and charged with making an in-depth study of related problems in all areas of the state. Legislation pending in the Congress, known as the Bennett Amendment to the Social Security Act which would establish stringent guide lines and impose certain punitive measures, points up the urgency for local action in this matter.

All county societies are encouraged to give priority to comprehensive health planning; particularly those societies that are inactive in this area are urged to become involved. Comprehensive guide lines may be obtained upon application to the headquarters office.

Dr. John R. Kernodle, North Carolina's first elected member of the AMA's Board of Trustees and now its vice-chairman, was endorsed by the Council for re-election to the Board at the AMA Annual Convention in 1971.

Before adjournment at the end of a day-long session, the Council, upon nomination by the Buncombe County Medical Society, elected Dr. Warren H. Cole to Honorary Membership. Dr. Cole, noted in the realm of biliary disease, collaborated with Dr. Evarts Graham in the development of cholecystography in 1924 and now lives in retirement in Asheville.

The Council also authorized a portrait of James T. Barnes to be placed in the new headquarters building and endorsed William N. Hilliard to succeed Mr. Barnes on the State Medical Journal Advertising Board.

J.S.R.

THE AMA DUES INCREASE

Why has the AMA increased its dues?

There are several factors involved. One of these is inflation. Since Jan. 1, 1967, the date of the last dues increase, inflation has been responsible for a \$4,539,000 rise in AMA expenditures. Cutbacks have been made in spending. For example, in spite of inflation, the payroll for clerical employees and the amount spent for travel will be no greater this year than in 1969. Yet the AMA must offer competitive salaries and benefits for employees, and must pay increased postage rates, property taxes, and charges for services and materials. These are the same rising costs that every physician has been encountering in his practice and his household. These are increased costs that cannot be avoided, costs the AMA must pay whether it has any new programs or not.

But new programs are an even more important factor in the dues increase. The membership, through the House of Delegates, demands new and expanded activities. Without these activities, the AMA could not provide leadership in health affairs and bring up-to-date services to the membership. Lacking these programs, the AMA would not be able to perform one of its primary services—speaking for the profession with a unified voice. The AMA must expand its working relationships with all branches of government and it must continue to press for enactment of its Medicare proposal at a time when numerous schemes for compulsory national health insurance are coming before Congress. The times we live in require expanded programs in medical education, manpower recruitment and utilization, environmental medicine, and health care delivery. The scientific programs of the Annual and Clinical Conventions must be improved and the structure of the Sections of the House must be revised. Services to state, county, and specialty medical societies must be expanded. New activities include a professional liability insurance program for members; a program to bring computer technologies into medical practice, research and education; a program to produce television documen-

taries telling medicine's story; and a program to provide continuing medical education, through audio-visual techniques, for medical societies, hospitals and individual physicians. Many of these programs, among others, are required by House action on the recommendations of the Committee on Planning and Development.

The AMA's budget has been narrowly in balance for two years. But this year the AMA is operating at a deficit. Gross income is estimated at \$31,108,440. Total expenses are expected to be \$32,034,955. Advertising revenue has declined in the last year or so, not just in AMA publications, but in all publications. The stock market decline has had an adverse effect on the AMA's investment portfolio. These are conditions, like inflation, that cannot be controlled by the AMA. They have resulted in a depletion of the AMA's reserve fund, which must be rebuilt. Moreover, in 1968 the House said the reserve fund should be increased to provide for the possibility that federal taxes would be levied on income derived from advertising in AMA publications. This possibility became an actuality at the last session of Congress. Each dollar of profit from advertising, when taxed, will be reduced to 52 cents.

The federal government has made it clear that not-for-profit organizations must now rely on dues as their principal source of revenue. Fortunately, a growing reliance on dues has been going on for some time in the AMA. In 1960, for example, 50% of the AMA's income was derived from advertising and only 23% from dues. This year 39% of AMA's income will be derived from dues and only 34% from advertising.

The key to future development of the AMA lies with the contribution of the membership—in terms of personal involvement as well as financing. The physician's financial

investment in his professional organization should become a unifying factor which will create a more concerned, participating membership. The AMA's success in achieving this kind of membership will determine whether physicians are to lead or be led in national health affairs.

John R. Kernedle, M.D.

* * *

THE PRESIDENTIAL NEWSLETTER

This issue of the *Journal*, as did the last, includes the President's Newsletter, which also went to the membership directly a short time after it was prepared. A reasonable question might be, "Why run it twice?" There are several considerations which led to the final action by the editor. First, the *Journal* serves an archival function, and aside from the minutes of various meetings, is the only place where one can go and read what a given president of the Society was thinking about during his term of office. The archival aspect of the *Journal* makes it possible to trace the evolution of policies, as an aid in their modification. Second, the *Journal* goes to readers other than Society members, all over the world, and the thoughts of the President are of interest to many of them. People such as the editors of the various controlled circulation medical journals, pharmaceutical executives, and government officials read the *Journal*, as witnessed by material excerpted from it, and none of them would get the newsletter in its primary distribution. Finally, some of our members might get to the material in the *Journal* before it surfaces in their other mail.

For all these reasons, the President gets double exposure, not-so-instant replay. He deserves it (even though he didn't ask for it), and so does Society business.

Note

The editorial in last month's issue introducing the new *Journal* feature, "What? When? Where?" was written by Dr. Ron W. Davis, Director of Continuing Education of the North Carolina Regional Medical Program, who will conduct the feature. We regret the omission of his name from the editorial.—*Ed.*

Correspondence

To the Editor:

I have just finished reading Dr. Richard S. Wilbur's article, "What Are We Doing Right?" in the September 1970 issue of *NCMJ*. I am sorry to say that I was quite disappointed in his rather defensive stance. Like the boxer he described he continually struck out but didn't connect. Certainly American medicine has a lot to be proud of, but this is hardly a reason to be complacent in this era of great problems in society in general and the health field in particular.

First, let us look at those who Dr. Wilbur accuses of swinging at us: "government officials and labor leaders—college professors and Congressmen—newspaper and magazine writers . . ." The Goldbergs, Kennedys, Reuthers and McNernys of this nation are not exactly the drop-outs of our society, nor are the *Wall Street Journal*, *Fortune* or the *New York Times* a collection of underground radical rags. Maybe they are trying to tell us something!

He finds it very painful to hear his colleagues discuss "their findings" (he does not allude to what findings) with the public instead of at medical society meetings "where something constructive might be devised." Might it be that many physicians turn to the public because of their right to know for what they are paying and because of constant rebuke from their colleagues, many of whom refuse to admit that there is a health care delivery problem today?

Dr. Wilbur builds a very nice case for the impingement of societal ills on the health of its citizenry. It is unfortunate that this observation was lost on the 1970 AMA House of Delegates who rejected: "Health is a status of complete physical, mental and social well-being and not merely the absence of disease or infirmity," and substituted instead: "Health is a state of physical and mental well-being."

He says that the AMA is urging medical schools to expand but fails to recount its previous long stand against expansion or federal support of medical education. The AMA

Medicredit plan which he refers to as a national health insurance plan seems, without a change in patterns of care and payment, to be a scheme to guarantee escalating costs without incentives to lower them. Certainly Harvard's Dr. Charles E. Lewis' observation that, in a Boston study, 70 per cent of all visits were doctor initiated, should give one food for thought.

Finally, few would fault the physicians who do treat those poor who do seek help. Yet medical and other health students who run free clinics for the poor across the US were offered only \$15,000 this past spring by the same AMA which wanted to spend \$10 million on a public relations campaign.

Dr. Wilbur is ready to return to the ring but be careful where you place your money. The AMA has one black eye from 1964 and remember, there are more patient voters than there are doctor voters. We would do well to take off the gloves and attempt to find a common ground while there is still time!

Douglas S. Lloyd, President
Davison Society (Student Government
Association and Student American
Medical Association)

P. O. Box 2889
Duke University Medical Center
Durham, N. C. 27706

* * *

Dr. Wilbur Replies

Thank you for the opportunity to review the letter from Douglas S. Lloyd, President of the Davison Society. I am delighted to find that he is also a careful reader of your excellent Journal, although we seem to see several issues differently. He mentions a "rather defensive stance" of American medicine in the face of attacks such as those which he unleashed. It is our belief that there is little or nothing to be gained by attacking those who speak against us. However, our unwillingness to be offensive does not mean that we are complacent. We feel, as he does, that there are tremendous problems in the health care field and we are now working on them in a wide variety of ways. In fact, the

AMA is much more concerned with the present and the future than it is in reviewing a long history of past statements and stances from previous decades.

We are more than ready to find a common ground with the patients whom we serve, and to lead in developing new systems of health care. At the same time, we are dismayed by the program presented in the Congress of a rigid, authoritarian, depression era, government dominated health care system devised by an emeritus professor and supported by a senator who has stated to the doctors of Leahy Clinic, "I don't know what's in the Kennedy bill, but we are going to push for it." This latter is not progress for patients; it is a campaign for politicians.

The AMA through all these years has been the practicing doctors' organization. These last two decades of increasing specialization in medical schools and the depersonalization of health care in hospitals, especially those run by Government or those used for teaching, have distressed us greatly. Increasingly, medical students have scorned the lowly "LMD"—the community's physician. The awakening interest of more recent students in the real problems of common people rather than the esoteric oddities of the well-screened few is like a breath of fresh air to us. We welcome you back. So let us meet together to discuss solutions. There is little to be gained by quibbling in print over such facts as that the letter overstates our proposed public relations campaign by a factor of twenty times or that the AMA actually gave twice the quoted amount of funds to the students' free clinics for the poor and has given many times that much for other programs for the disadvantaged. What is important is that we all work together to improve health care, not that we stand around shouting as to who is more interested than whom in delivering it. Let us now fill the pages of your magazine with suggestions for our mutual attack upon disease, not upon other healers.

Richard S. Wilbur, M.D.

Committees & Organizations

COMMITTEE RESOLUTIONS FALL CONCLAVE OF OFFICERS AND COMMITTEEMEN MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

Southern Pines, Sept., 1970

Committee on Drug Abuse—William A. Robie, M.D., Chairman

The Committee on Drug Abuse recommends that the Committee on Legislation: (1) Review current laws as applicable to users of drugs and penalties thereof. (2) It was suggested that the Legislative Committee review the model laws of the District of Columbia as an example in order for our state laws to be comparable to the federal laws.

The Committee on Drug Abuse recommends to the Executive Council that the Medical Society of the State of North Carolina go on record as recommending that North Carolina General Statute 20-17.1 be voided.

Committee on Medicare—John Glasson, M.D., Chairman

It was the consensus of the Committee to approve the following policy statement and pass it on to the Executive Council with recommendation for approval:

1-a The primary attending physician is the one who admits, attends, and discharges the patient. He remains the primary physician until or unless care is transferred to another physician and this transfer is documented by a written order on the chart.

1-b The consultant should be compensated generally on the basis of consultation services in cases involving non-surgical care when the scope of his service falls within the scope of services usually rendered by the primary physician.

2-c The Committee recognizes that complex or unusual problems even within the scope of such similar services may entitle the consultant to additional and/or unusual payment.

Committee on Association of Professions—Thomas G. Thurston, M.D., chairman

The Committee on Association of Professions supports the resolution from Blue Ribbon Committee No. 2 to urge the North Carolina State Board of Medical Examiners to exert leadership in establishing minimum standards for the collection of biographical and educational data of licensees of the several health regulating boards . . . and that such endorsement be passed on to the Executive Council of the State Society . . . and further that the Committee on Association of Professions of the MSSNC solicit the cooperation of the North Carolina Association of Professions in support of non-centralization of the professional licensing boards.

The Committee requests the Committee on Occupational Health to consider preparation of a state-

ment on environmental health that might be submitted to the member professions of the N.C. Association of Professions for their support to effect a coordinated approach to the widespread problem.

Whereas there is a definite shortage of health manpower, and whereas a large number of college students who are not successfully admitted to medical school and are sufficient health manpower, therefore this Committee asks the Committee on SAMA to study and recommend how these students can be counseled.

The Committee moved that its chairman, after consultation with Dr. John Kernodle, prepare a resolution to be presented by the North Carolina delegates at the next meeting of the AMA House of Delegates requesting endorsement by the National Association of Professions.

The Committee recognizes that wives play an important role in the location of professional people in towns and communities and requests that member professions be made acquainted with this problem and asks for suggestions as to how it could be solved.

Committee on Public Relations—John L. McCain, M.D.,
Chairman

On gift subscriptions to Today's Health and AMA News:

The Committee approved sending both AMA News and Today's Health to members of the North Carolina General Assembly, the Governor, the Council of State, and Supreme and Superior Court judges for a period of three months, at the end of which they would be asked which of the two publications they would like to continue receiving on a complimentary basis.

The Committee also moved that the president of each county medical society make it his business to see that the local high school in this area receive the physician's surplus medical publications: Medical World News and Today's Health.

The Committee recommended that the Disaster Medical and Emergency Care Committee be made acquainted with the problem of the relationship between the local medical units and rescue squad in an effort to clarify the legal status of these rescue squads; i. e., the legal risks in rendering non-medical first aid, and the use of the red light.

The Committee approved continuation of the Conference of County Medical Society Officers and Committeemen. It moved that the Executive Council be asked if chiefs of staff and new members should be invited to attend the conference.

The Committee recommended that the Medical Society purchase lunch for participants in the 1970 Speech Training Course on Nov. 11 and 12, 1970.

It recommended that a method be developed for the early transfer of information to chairmen of committees regarding action on the committees taken by the Council.

Regarding the updating of the information packet for physicians, the Public Relations Committee recommended that a letter from the President, Dr. Louis deS. Shaffner, a copy of the Medico-Legal Code, and

the AMA Code of Ethics be sent to each physician upon completion of examination or endorsement by the Board of Medical Examiners. It recommended revision of the information booklet for physicians (last edited in 1966); that copies be sent to the related committee regarding items in the booklet; that consideration be given to a loose-leaf binder so that periodic additions could be made; and that copies of the updated booklet be distributed to members of the State Medical Society and new members.

Other motions approved:

That physicians in listing their names on stationery and signs in front of their offices, etc., be encouraged to use "M.D." instead of "Dr."

That the Committee supports the appointment of an ad hoc committee of the State Society to consider a peer review organization . . . and further encourages physicians to accept the concept of PRO and agree to participate in its functions.

Committee on Hospital and Professional Relations and Liaison to the North Carolina Hospital Association.
Joe M. Van Hoy - Chairman

The chairman reported the current opinion of the Duke Endowment that it is neutral toward the appointment of physicians to hospital boards of trustees, but held to the opinion that they should be eligible to serve as any other knowledgeable person might serve. The reasoning on the above is that if a physician is appointed to the board because he is a physician, then other groups might ask for representation, which would be impossible.

On the subject of staff by-laws, the following recommendation was approved for presentation to the Executive Council:

The Committee on Hospital and Professional Relations recommends to the Executive Council that the staff and by-laws of all hospitals be so written that the status of full-time physicians employed by the hospitals be subject to the same rules and regulations as other physicians on the medical staff of the hospital. It is also recommended that a copy of the action taken by the Executive Council be sent to the North Carolina Hospital Association.

On political control of public hospitals the Committee recommended:

That the Medical Society of the State of North Carolina urge upon its members that in their communities they use their influence to remove public hospitals from political control.

Mr. John Ketner of the North Carolina Hospital Association reported on the problem of requests for laboratory studies by State Highway patrolmen on persons brought by them to hospital emergency rooms. It was noted that other lay persons have been known to request certain diagnostic procedures in emergency room without a physician's approval.

The followed recommendation was approved:

That the Medical Society of North Carolina recommend that hospitals not perform any diagnostic procedures other than those requested specifically by physicians.

Mr. Ketner discussed some problems that hospitals

are facing, probably the greatest of which is getting insurance carriers to pay hospitals for claims filed. It is estimated that \$50 million are tied up at present between these carriers and the hospitals. However, the North Carolina Hospital Association and the insurance industry are working together to get claims processed more rapidly.

Council on Planning—David G. Welton, M.D., Chairman

Most of the meeting was devoted to the first item on the agenda: Government Health Programs. Dr. John Glasson discussed current problems with Medicare and Medicaid. Medicare allowances for physicians' services are structured according to the prevailing charges in four geographic categories. There is considerable objection to this policy. Dr. Simmons Patrick pointed out that it does not encourage physicians to practice in areas where payments are less. Daily concurrent care by two doctors is another problem.

Regarding Medicaid, Dr. Kernodle asked why physicians are receiving reduced payments when pharmacists and dentists are getting full payment. Dr. Frank Jones stated that the basis for this discrepancy comes from the fact that the fiscal intermediary had pre-medical profiles on physicians but not on dentists, pharmacists and others.

Dr. Kernodle reported that the bill introduced recently into the U. S. Senate by Senator Ted Kennedy which proposed the establishment of a National Health Service is now opposed by HEW Secretary Richardson, according to testimony by Secretary Venneman. These problems will be taken up in more detail at the meeting of the Medicare Committee and with Mr. Charles Wilkerson and the Committee on Social Service Programs.

Comprehensive Health Planning was discussed by Dr. Frank Jones of the Governor's Advisory Council. This program is now moving along in North Carolina. Dr. Jones presented a book containing complete indexed information on Comprehensive Health Planning; copies have been sent to Society officials and members of the Comprehensive Health Planning Committee. Since this is the most complete compilation available to us, additional funds may be requested to produce more copies in order to meet requests from other members of the Society.

Dr. Jones also reported on recommendation which will be made to the Governor and the General Assembly from task force meetings. These are numerous; some have significant potential which we must recognize and attempt to direct. From the Third Task Force, for instance, came the statement that data are not readily retrievable on licensed manpower. At this point Dr. Jones presented the following:

STANDARDIZATION OF INFORMATION DATA
OBTAINED BY ALL LICENSING BODIES IN
THE STATE DEALING WITH THE HEALTH
PROFESSIONS.

There is demonstrated evidence that an accurate picture of the health manpower resources of this state cannot be obtained with the present widely differing operational policies of the several autonomous licensing bodies.

Without question the movement to centralize licensing of the health professions within a state government agency will continue. The current proposal for placing the administrative functions of licensing in a single state agency received opposition and was tabled. This subject will likely be taken from the table in November or at some feasible time in the reasonably near future.

The argument of proponents that such centralization will enhance efficiency and be more economical, while leaving the specialized functions of the several boards unchanged, is an attractive one for the general public, the legislature, and the weaker licensing boards. Medicine and the other disciplines of the health professions are very much aware of the portent—that being the effective emasculation of the total function of the boards and in turn so dilute their public protection element that their sole function will be making up the examination questions, grading the papers, and holding perfunctory hearings.

If this Society elected to establish a "socio-economics department," a data gathering function of the State Board of Medical Examiners would be of great value, as such would refer to licensees. Although it may well be said that a lot of crude data on physician manpower in the state is present in the files, there is no mechanism for storing and retrieving this data to the end that meaningful studies can be made.

A long and spirited discussion followed, during which Dr. Kernodle discussed some of the concerns of the American Medical Association dealing with current socio-economics problems and organizational needs. After considering at length two possible mechanisms—one compulsory and including all health licensing boards, the other voluntary—the following motion was passed.

That the Medical Society of the State of North Carolina propose immediate formation of a voluntary liaison group to include representatives of the major health professional organizations and representatives of all health professional licensing boards.

That we urge and insist that the State Board of Medical Examiners cooperate with the administrative officers of the Medical Society in the establishment of such an organization as soon as possible.

The primary function of this group would be to formulate minimal, uniform standards for the statistical data concerning all registrants of these respective boards as well as members of related health professions who do not have a licensing board.

That such minimal standards include adequate input and retrievability, thus insuring the continual availability of comprehensive information relating to the registrants currently involved in medical and health care.

The above motion was seconded and carried unanimously.

A written report on the activities of the Committee on Personnel and Headquarters Operation was submitted by Dr. Charles W. Styron, President-elect and chairman of this committee. Copies were distributed to those present. This subject will be scheduled for discussion during the next meeting of the Committee on Personnel and Headquarters Operation, tentatively set for the Friday afternoon during the Officers' Conference next January.

Dr. Kernodle discussed the AMA dues increase and was asked to be present at the Executive Council meeting to present these facts to the Council. Within the next year or so the AMA budget will be completely program oriented rather than department oriented.

Regarding the Peer Review Organization, Dr. Beddingfield discussed the many undesirable features of the Bennett bill now in Congress. Originally supported by the AMA, this bill has been virtually rewritten by the congressional staff and is now unacceptable to the AMA. For example, if a medical society is not willing or is unable to handle PRO functions, the Secretary of HEW can enter into a contractual agreement with others, meaning hospital administrators.

The following recommendation to the Executive Council was approved unanimously:

To establish an ad hoc committee on peer review to include the chairman of our utilization, claim review, and other committees presently involved in peer review functions, along with other knowledgeable individuals appointed by the President of this Society. This Committee is to report back to him and through him to the Executive Council.

Committee on Child Health and Infectious Diseases— David T. Tayloe, Chairman

The following statement was passed unanimously.

Measles (rubeola) is a communicable disease controllable only by immunization of a high percentage of susceptible children, and in spite of the availability of an effective live, attenuated measles vaccine since 1963, there still remain an estimated 400,000 susceptible unimmunized children in North Carolina, and outbreaks of measles still occur among such children, 780 cases being reported to the State Board of Health during the first six months of 1970. The Committee on Child Health and Infectious Diseases recommends that the Medical Society of the State of North Carolina support legislation by the North Carolina General Assembly requiring that all children in the State by the age of two years be immunized against rubeloa.

The Committee also approved the following motion:

In an effort to improve the delivery of medical care, we heartily endorse the State Board of Health's project entitled "Expansion of the Child Health Nurse Practitioner's Role."

Bulletin Board

NEW MEMBERS OF THE STATE SOCIETY

- Nagui R. El Bayadi, M.D., S, Eastgate, Sylva 28144
Morton Meltzer, M.D., P, Route 4, Box 105-A, Durham 27703
Robert Jenkins Cowan, M.D., R, 3249 Paddington Lane, Winston-Salem 27106
William Stuart Bost, Jr., M.D., OALR, 1800 W. 5th Street, Greenville, 27834
James Franklin James, M.D., P, Cherry Hospital, Goldsboro 27530
Jack H. Welch, M.D., ANES, 1340 E. Cooper Dr., Lexington, Ky 40502
Mitsunobu Toyama, M.D., Path, 400 Staffordshire Rd., Winston-Salem 27101
David Savitz, M.D., 4705 Shattalon Dr., Winston-Salem 27106
William Ross Pitzer, M.D., OALR, 2701 Buena Vista Rd., Winston-Salem 27106
Robert Morton Kerr, M.D., G, 2451 Greenbrier, Winston-Salem 27104
George Capers Hemingway, Jr., M.D., I, 1597 Speight Forest Dr., Tarboro 27886
John Henry Edmonds, Jr., M.D., C, 2494 Woodberry Dr., Winston-Salem 27106
Freeman Albert Berne, M.D., R, W. 27th St., Lumberton 28358

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Dr. William G. Anlyan, vice president for health affairs, and Mrs. Anlyan, were received by Pope Paul VI at a private audience at the Pope's summer residence outside Rome in September. Dr. Anlyan headed a three-week mission to Poland, Yugoslavia, Israel, and Italy for the National Library of Medicine. He is a member of its Board of Regents.

* * *

Dr. Roscoe R. Robinson, professor of medicine, has been named chairman of the new Council on the Kidney in Cardiovascular Disease of the American Heart Association.

* * *

Dr. Carl Eisdorfer, professor of psychiatry and medical psychology, has been named chief of the division of medical psychology on a temporary basis. He replaces Dr. Robert Carson who resigned from the administrative post but who will remain on the medical psychology staff.

* * *

Nine Medical Center faculty members have been promoted to full professorships. New professors of medicine are Dr. Joseph C. Greenfield, Jr., Dr. Kaye H. Kilburn, Dr. John Laszlo and Dr. Ernst Peschel. Dr. Joachim R. Sommer and Dr. Benjamin Wittels were promoted to professorships in pathology. Others were Dr. Norman Kirshner, professor of biochemistry-genetics; Dr. Joseph B. Parker, Jr., professor of

(Continued on page 436)

WHAT? WHEN? WHERE? In Continuing Education

Current Events

January 26-29

Head and Neck Anatomy Conference

Sponsor: Division of Medical Sciences and Division of Continuing Education, East Carolina University

Place: East Carolina University, Greenville, North Carolina

Tuition: \$150 (\$75 for students in residency programs)

Open to holders of M.D., D.D.S., or D.M.D. degree

For Information: Division of Continuing Education

East Carolina University

Greenville, North Carolina 27834

February 11

Symposium on Basic Concepts of Viral Disease

Sponsors: Communicable Disease Center, State Board of Health, Merck, Sharp, Dohme, and Memorial Hospital of Wake County

Place: Memorial Hospital of Wake County, Raleigh, North Carolina, 9:00 a.m. to 4:00 p.m.

For Information: William A. Robie, M.D.

Director of Medical Education

Memorial Hospital of Wake County

3000 New Bern Avenue

Raleigh, North Carolina 27602

February 19-20

Institute for Local Boards of Health—Designed to increase ability of local board members to protect and promote public health. Sessions on legal and administrative responsibilities, new developments in state and local government, related community programs, and local problems and future action.

Sponsor: Institute of Government, State Board of Health, and North Carolina Conference of Local Health Directors

Place: Institute of Government, University of North Carolina at Chapel Hill

Open to members of local Boards of Health and local Health Directors

For Information: Institute of Government

Chapel Hill

North Carolina 27514

Regularly Scheduled Programs

1st and 4th

Saturdays,

8:00-9:00 a.m.

Regional Continuing Education Program for Physicians. Speakers and case presentations

Sponsors: Medical Staff: Marlboro General Hospital (MGH), Bennettsville, South Carolina;

Scotland Memorial Hospital (SMH), Laurinburg, North Carolina; and Chesterfield County

Memorial Hospital (CCMH), Cheraw, South Carolina

Place: Nov. 7—SMH; December 5—CCMH; Jan. 23—MGH; Feb. 27—MGH

For Information: W. H. Davidson, M.D.

Scotland Memorial Hospital

Laurinburg, North Carolina 28352

Alternate

Tuesdays,

1:00 p.m.

Tumor Board Conference: Presentation of problems by practicing physicians with conference telephone communications with multispecialty panel.

Sponsors: Regional Medical Program, New Hanover Memorial Hospital, Duke University Medical Center

Place: Margaret Graham Conference Room, New Hanover Memorial Hospital, Wilmington, North Carolina

Dates: Oct. 20; Nov. 3 and 17; Dec. 1, 15, and 29; Jan. 12 and 26; and February 9 and 23

For Information: L. B. Mason, M.D.

New Hanover Memorial Hospital

Wilmington, North Carolina

If you wish an activity listed, please send complete information to **WHAT? WHEN? WHERE?** Box 8248, Durham, North Carolina 27704. Information should be received at this address six weeks prior to the month of activity.

psychiatry; and Dr. Aaron P. Sanders, professor of radiology.

* * *

Dr. Delford L. Stickel, an associate professor of surgery, has been named chief of staff at the Veterans Administration Hospital in Durham. He replaces Dr. Raymond W. Postlethwait, who is now director of Duke's Sea Level division in Carteret County.

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NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH SCIENCES

The Health Sciences Library of the University of North Carolina prepares for several of the medical center personnel a current bibliography on drug abuse and addiction. This includes articles located by scanning journals as they are received in the library. It is compiled at intervals of two or three weeks, depending on the number of articles located.

We welcome inquiries about this bibliography from physicians who are dealing with this problem. Such inquiries should be sent to the Reference Department, Health Sciences Library, University of North Carolina, Chapel Hill, N. C., 27514.

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Dr. Floyd A. Fried, associate professor of surgery, has been named chief of the Division of Urology.

Dr. Fried comes to the University from the University of Chicago where he has been assistant professor of surgery (urology) since 1966.

* * *

The State's only AMA approved School of Radiation Therapy Technology has graduated its first class.

Located in the Division of Radiation Therapy at North Carolina Memorial Hospital, the School's program consists of a year of intensive training for certified radiologic technicians in the use of modern radiation therapy equipment.

The graduates are now qualified to assist the radiation therapy physician in treating cancer patients with sophisticated equipment such as Cobalt, Betatrons, Linear Accelerators and Treatment Simulators.

* * *

C. V. Richardson, a N.C. hosiery manufacturer, believes that sharing his profits with worthy organizations has been a key factor in his business success.

The newest and largest Richardson gift was a \$100,000 contribution to the Medical Foundation of North Carolina, Inc.

The money will be used to construct the C. V. Richardson Laboratory at North Carolina Memorial Hospital on the University of North Carolina campus in Chapel Hill. The laboratory will be used for the diagnosis of complex heart conditions.

According to Dr. Ernest Craige of the UNC School of Medicine, the new diagnostic laboratory will help tell the surgeon what he needs to know about the heart of a child or adult with heart disease.

By inserting a catheter into the heart, the physi-

cian can detect detours, by-passes or road blocks within the heart. Or he can measure blood pressure within the heart. Finally, he can release opaque liquid inside the heart and photograph what he sees for later study.

Dr. Craige, also the chief cardiologist in N.C. Memorial Hospital, says that diseases of the heart make up about 25% of the illnesses seen in patients coming to the hospital in Chapel Hill.

"The gift of Mr. Richardson will make possible changes that will provide more accurate and safer diagnostic studies for our cardiac patients and more productivity in research," Dr. Craige says.

* * *

Approximately 50 nursing home administrators throughout southeastern North Carolina are attending an "Educational Program for Waivered Nursing Home Administrators"—the first of its type in the nation.

Developed by Continuing Education and Field Service, UNC School of Public Health, it is the first of its kind offered in the nation under Federal legislation, Public Law 90-248 (Section 103), which requires states to establish programs for licensing home administrators, as well as to provide them a program of training and instruction.

The course also will be offered to the remaining nursing home administrators in Central and Western North Carolina.

Dr. Elizabeth L. McMahan, associate professor of health education, is education director, assisted by Mrs. Frances O. Gust, assistant professor of health administration, both in the UNC School of Public Health.

* * *

Dr. Floyd M. Denny, professor and chairman, Department of Pediatrics, is now on a leave of absence which began Sept. 1 and will end August 31, 1971. He will conduct research in the laboratory of Dr. David Tyrrell at the Clinical Research Centre in London, England.

Dr. Donald D. Weir, associate professor, Department of Medicine, will take an extension of leave of absence from Sept. 1 to July 31, 1971, to allow him to complete work he has begun in organizing the rehabilitation center at the University of Iowa and St. Luke's Hospital.

* * *

Enrollment in the University of North Carolina's Division of Health Sciences hit a new high with 1,914 students registered for the fall semester. Last year's fall enrollment in Health Sciences was 1,785. The School of Pharmacy led the way with the largest number of students, 573, up from last year's 513. Enrollment in the School of Public Health topped 499 for the first time this fall. Last year the total was 345, all graduate students.

Medicine is up this year also, with a total of 337 students enrolled for the fall term. This year marks the first freshman class of 100 students. Last year's freshman class was 85. Nursing has 223 students, compared with 235 for the same period last year.

The School of Dentistry will have 224 students this fall, compared with 223 last year. The freshman class has increased from 60 students last year to 75 this year.

* * *

Glenn Wilson, executive vice president of the Kaiser Community Health Foundation in Cleveland, has joined the University of North Carolina faculty as associate dean for Community Health Services in the School of Medicine. In addition to his medical faculty appointment, he will also be a research associate in the UNC Health Services Research Center.

Immediately prior to his coming to Chapel Hill, Wilson was consultant on health services to the dean of the University of Pennsylvania Medical School.

Regarded as one of the most successful health planning programs in the United States today, the Cleveland, Comprehensive Health Planning Agency is an organization which Wilson helped establish and of which he was chairman of the board. In this position he sought to bring together the thinking of physicians, dentists, and city and county and federal government officials.

* * *

Dr. Earl Siegel, professor and chairman, Department of Maternal and Child Health, will take leave of absence, Aug. 1, 1971-Feb. 1, 1971, to pursue studies in social medicine and family health with Dr. Sidney Kark, head, Department of Social Medicine, Hadassah Medical School, Jerusalem, Israel.

* * *

Dr. John P. Filley, associate professor, Department of Mental Health, is on a leave, Sept. 1 to June 30, 1971, to carry on an independent project of writing which can best be carried on in the vicinity of Munich, Germany.

Dr. Arnold D. Kaluzny, associate professor, Department of Health Administration, on leave Sept. 1, 1970 - Aug. 31, 1971, to be visiting professor at the National Institute for Health Administration and Education, Delhi, India.

Dr. Naomi Morris, associate professor, Department of Maternal and Child Health, will be on leave from Sept. 1 to Aug. 31, 1971, to enable her to have a reality-based field experience which will contribute to her professional growth, adding new insight to her future teaching and research. She will be employed full-time by the territorial government of Guam in the capacity of consultant in public health.

* * *

The UNC School of Pharmacy is breaking all its 74 year old enrollment records but the prettiest one of all is the great increase in eager beginning female students. The 1974 class has 50 women in a total enrollment of 142 students (35.2%). Actually 155 of the 565 total students are women or 27.5%. The national average last year was 20%.

* * *

Frederick C. Heaton, third-year medical student, presented a paper entitled "The Use of Umbilical Cord for Reconstruction of Abdominal Wall Defects"

at the annual meeting of the American College of Surgeons held in Chicago.

The paper was written in collaboration with Dr. Colin G. Thomas, Jr., chairman and professor, Department of Surgery, and Mrs. Judith Owen, laboratory technician.

Dr. Thomas also participated in one of the post-graduate courses in surgery of the gastrointestinal tract, specifically "Recent Advances in the Management of Rectal Prolapse."

* * *

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY

John E. Lynch, a Kansas City hospital executive, has been elected executive vice president (administration) of North Carolina Baptist Hospital. He began his new duties Oct. 7.

In announcing the new position, Colin Stokes, chairman of the Hospital's board of trustees, said that the medical center's present building program will result in a 50% increase in the number of patient beds by 1972 and in a doubling of outpatient visits to the hospital's clinics soon thereafter. He said that this appointment is being made now to augment the hospital's central administration to allow proper planning for the opening of the expanded facilities as well as for the expansion of hospital services.

Lynch, who entered the hospital management field in 1962, was assistant executive director of the Kansas City Research Hospital and Medical Center which has 517 beds and is the largest medical center in the Kansas City, Mo., area.

In his new position, Lynch will direct the daily operations of Baptist Hospital. Reid T. Holmes is president and chief executive officer of the hospital.

* * *

Dr. Richard T. Myers, professor and chairman of the Department of Surgery at the Bowman Gray School of Medicine, was the Founders Day Lecturer of the J. C. Thoroughman Surgical Society Sept. 12 in Atlanta, Ga. He spoke on "Preventive, Diagnostic and Therapeutic Aspects of Surgical Diseases of the Liver."

* * *

Dr. Timothy C. Pennell, assistant professor of surgery, recently was appointed to the Forsyth County Health Planning Council.

* * *

Louis Weinstein of Revere, Mass., a third-year student at the Bowman Gray School of Medicine, attended the Armed Forces District Meeting of the American College of Obstetricians and Gynecologists as a student representative. The meeting was held Oct. 18-23 in Las Vegas, Nev.

The selection was made on the basis of Weinstein's work last summer at the U. S. Naval Hospital at San Diego, Calif. He was there for two months as a participant in the Navy's special Ensign 19-15 program

for medical students. He was chosen from more than 100 medical students who participated in the program in the Navy's Western District.

Weinstein has worked for two summers as a student research fellow at the Bowman Gray School of Medicine in the laboratory of Dr. John P. Gusdon Jr., associate professor of obstetrics and gynecology. Their studies on feto-maternal transfusion resulted in a scientific paper which has been published in the *Journal of Obstetrics and Gynecology*.

* * *

Dr. Richard L. Burt, professor and chairman of the Department of Obstetrics and Gynecology, was a visiting professor at the University of Southern California School of Medicine Sept. 13-16. While there he presented two lectures and participated in three open forums at a postgraduate course on "Diabetes in Pregnancy." His lecture topics were "Glucose Tolerance during the Puerperium" and "Obstetrical Complications in Diabetes."

* * *

Dr. Clair E. Cox, associate professor of urology, participated in the International Cephalosporin Symposium Sept. 21-22 at the Royal College of Physicians, London, England, where he presented a paper on "Cephalosporin Therapy of Urinary Tract Infections." Earlier in the month he was a guest speaker at the United States Air Force in Europe Medical Service Training Conference in Berchtesgaden where he spoke on "Gentamicin Therapy of Serious Gram-Negative Infections" and "Antimicrobial Therapy of Urinary Tract Infections."

* * *

Dr. John H. Edmonds Jr., associate professor of medicine, participated in a symposium on Coronary Care Sept. 17-18 in Bryson City. He spoke on "EKG Interpretation and Treatment of Cardiac Arrhythmias."

* * *

Dr. Richard Janeway, associate professor of neurology, participated in the International Symposium on Cerebral Blood Flow Sept. 17-19 in London, England. He presented a paper on "Precision Analysis of Intravenous Rapid Sequence Scintiphotography: Further Experience with the Gamma Camera." The symposium was held at the Institute of Neurology, National Hospital, Queen's Square, London.

Dr. Janeway also participated in the 18th annual meeting of Markle Scholars Sept. 20-23 at Harrison Hot Springs, British Columbia, Canada.

* * *

Dr. James F. Martin, professor of radiology, was a member of the guest faculty for a symposium on Diagnostic Radiology of Gastrointestinal Tumors Sept. 10-11 at the Lahey Clinic Foundation, Boston, Mass. He lectured on "Atrophic Gastritis" and "Radiographic and Gastric Camera Correlation of Lesions of the Stomach."

* * *

Six scientific papers prepared at the Bowman Gray School of Medicine were presented at the 15th annual meeting of the American Institute of Ultrasound in Medicine Oct. 12-15 in Cleveland, Ohio.

Dr. William M. McKinney, assistant professor of neurology and director of the Bowman Gray Sonics Laboratory, presented three papers and served as coordinator for a session on echoencephalography.

He spoke on "Pulsatile Echoencephalography," "A Review of Echoencephalography" and "The Development of a Clinical Sonic Laboratory."

Dr. Ralph W. Barnes, research instructor in neurology, presented papers on "Engineering and Acoustical Principles Applied to Echoencephalography," "An Ultrasound Moving Target Indicator System for Diagnostic Use" and "Ultrasound Evaluation of Heart Prostheses."

The Sonics Laboratory at the Bowman Gray School of Medicine was developed initially for the examination of the brain. Recently its studies have been expanded to include the areas of cardiology, obstetrics and ophthalmology. Six members of the interdisciplinary sonics group attended the meeting in Cleveland.

* * *

Dr. Moseley Waite, assistant professor of biochemistry, presented a seminar on "Liver Phospholipid Metabolism" recently at the Joslin Research Laboratory, Boston, Mass.

* * *

NEWS NOTES FROM THE NORTH CAROLINA REGIONAL MEDICAL PROGRAM

Two physicians and one dentist are new appointees to advisory committees of the N. C. Regional Medical program. J. Dale Simmons, M.D., Mt. Airy, is a new member of the Heart Disease Advisory Committee. H. Max Schiebel, M. D., Durham, chairman of the Governor's Commission to Study the Cause and Control of Cancer, and E. Jefferson Burkes, Jr., D.D.S., UNC School of Dentistry, Chapel Hill, have been appointed to the Cancer Committee.

The committees review and counsel on new projects submitted in their subject areas for funding by N. C. RMP. Currently, N. C. RMP supports five projects in heart disease and five in cancer.

* * *

Physicians who will coordinate newly formed stroke teams for counties entering North Carolina Regional Medical Program's Comprehensive Stroke Program are: Dr. Philip J. Fail, Lenoir; Dr. George Hemingway, Tarboro; Dr. George H. Armstrong, Mt. Gilthead; and Dr. Thomas F. Kelley, Albemarle.

The program aims to improve the diagnosis and treatment of patients with stroke by establishing hospital-based teams of professional health personnel to work with the patient through the rehabilitation period. At present 19 counties involving 21 hospitals, 19 health departments, and nine nursing homes are participating.

At a basic training course held recently at Bowman Gray School of Medicine for members of the four new stroke teams entering the project, E. T. Preston, M.D., Director of Rehabilitation Medicine, UNC School of Medicine, spoke on Rehabilitation, What is It?"

Serving as faculty members for the didactic phase of the recent coronary care nurse training course, held at Charlotte Memorial Hospital were the following Charlotte physicians: Dr. Marvin M. McCall, III, Dr. George Irons, Dr. Charles Harris, Dr. Robert Payne, Dr. David Citron, and Dr. William Sugg.

Also participating were Carolyn Brittain, R.N., and Barbara Bain, R.N., nursing education coordinator for projects funded by the North Carolina Regional Medical Program and administered by the North Carolina Heart Association.

The month-long course is part of the Coronary Care Training and Development project, whose director is James M. McFarland, M.D., and which is supported by an N. C. RMP grant of \$95,083.

The project trains personnel to manage coronary care units in North Carolina hospitals.

* * *

The North Carolina Regional Medical Program, now in its third operational year, was slated for a site visit November 16-17 from Regional Medical Programs Service, headquartered in Washington. In its role of reconnaissance, surveillance, and guidance, the site team was to review progress made by N.C. RMP with attention to program direction, as versus a review of its 20 separate current projects.

RMPS is especially concerned with North Carolina Regional Medical Program's cooperative arrangements with other health groups in North Carolina and with regionalization as it links research and education to improved patient care for all Tarheels. RMPS is also interested in N.C. RMP's priority system for selecting projects, its organizational structure and its relationship to Bowman Gray, UNC, and Duke schools of medicine. Key representatives from the medical schools, the Regional Advisory Council (headed by George W. Paschal, M.D.), and the State Medical Society, as well as other key groups will be present, along with N.C. RMP project directors and core staff.

* * *

As North Carolina Regional Medical Program reviews potential renewal and new projects for Fiscal Year 1971, its cooperative activities continue to reflect planning and development for which no specific project funds are allocated. Often these do not fall within one of the categorical disease areas for which N.C. RMP is charged responsibility: heart disease, cancer, stroke, kidney, and related diseases.

During the past year, for instance, its activities reflecting cooperative endeavors included: the development of a coronary care system in the seven counties comprising the State of Franklin Health Council; the implementation of the phonocardiogram project in the four-county area comprising the Blue Ridge Health Council, and the use of multi-media technique for continuing education in the MidCrescent Health Planning Council, the State of Franklin, and in six hospitals in the Fayetteville area.

Other projects funded for continuation in the year ahead are:

Education and Research in Community Medical Care, to develop a model community medical practice

in a rural area and help communities in area health planning, W. Reece Berryhill, M.D., UNC, director; Coronary Care Training and Development (of coronary care units), James A. McFarland, M.D., Duke; Diabetic Consultation and Educational Services, Luther W. Kelly, Jr., M.D., Nalle Clinic, Charlotte; Central Cancer Registry, James F. Newsome, M.D., UNC.

Also Continuation Education (of physicians) in Internal Medicine Louis G. Welt, M.D., UNC; Continuation Education in Dentistry, Don Marbry, D.D.S., UNC; Continuation Education for Physical Therapists, Marjory W. Johnson, UNC; Network of Coronary Care Units in Community Hospitals in Appalachia, Robert N. Headley, M.D., Bowman Gray; Closed-Chest Cardiopulmonary Resuscitation (for communities and hospitals), Dr. McFarland; Comprehensive Stroke Program for North Carolina (communities and hospitals), B. Lionel Truscott, M.D., Bowman Gray.

Also, Heart Consultation and Education Program (for physicians in Western North Carolina), Dr. Headley; Hypertension Project for North Carolina (to develop a regional program of diagnosis and therapeutics for patients and an educational program for physicians), James W. Woods, M.D., UNC; North Carolina Tumor Tissue Registry, Herbert Z. Lund, M.D., Moses Cone Hospital, Greensboro; Trophoblastic Cancer Project (to study and cure the once 100% fatal cancer of the placenta), Roy T. Parker, M.D., Duke; Innovations in Clinic Nursing, Dr. Susanna Chase, UNC; Coordinated Oncology Chemotherapy Program (chemical treatment of tumors), Charles L. Spurr, M.D., Bowman Gray; and Heart Sounds Screening of School Children, Dr. Headley.

The diabetes project is administered by the N. C. Diabetes Association.

The following N. C. RMP-funded projects are administered by the North Carolina Heart Association: Cardiopulmonary Resuscitation, Coronary Care Training and Development, and Heart Sounds Screening of School Children. Comprehensive Stroke Program is co-administered with the Heart Association.

Joint administrative responsibility for the Central Cancer Registry has been assumed by the North Carolina State Board of Health.

* * *

"Continuing Education in Internal Medicine," one of the projects funded for continuation by the North Carolina Regional Medical Program, has brought 25 internists, one at a time, from throughout the state to the three medical schools for a two or four-week "learning sabbatical." Their average age is 40. To participate, they must have been out of medical school for 10 years or more. In a program tailored just for them, by advance questionnaire, they learn by working in both an academic and a clinical setting on problems they don't see routinely in their daily work.

The internists' typical day might be: 8 a.m., read electrocardiograms; 10-12, make patient rounds; afternoon: make specialty conference. Sometime in-between, or afterwards: library research. The afternoon pro-

gram might offer: Monday, a department seminar; Tuesday, a death (autopsy) conference; Wednesday, part of a lecture series; Thursday, grand rounds; and Friday, a seminar.

Operational since 1968, the project has had the following participating internists:

Drs. Vernon Offutt and William T. Parrott, Kinston; Francis P. King, John R. Baggett, Robert P. Holmes, New Bern; James R. Collett, Morganton; Amos T. Pagter, Tryon; William H. Flythe, High Point; Thomas E. Fitz, Hickory; Frederick A. Thompson, Lenoir; Thomas B. Templeton and N. Max Lewis, Statesville.

Also, George E. Koury, Burlington; William J. Senter, Raleigh; John I. Brooks and John L. Whaley, Tarboro; Cornelius T. Patrick, Henry L. Stephenson, Clark Rodman, Washington; Walter B. Burwell, Henderson; Edward G. Bond, Edenton; John D. Wallace, Gastonia; Luther W. Kelly, Jr., Robert B. Payne, and Ralph Kidd, Charlotte.

* * *

SEMINAR ON COMMUNITY PRACTICE OF NEPHROLOGY

A seminar on "The Community Practice of Nephrology" has been scheduled in Durham and Chapel Hill, North Carolina, on February 22-24, 1971 under auspices of the American Heart Association's Council on the Kidney in Cardiovascular Disease.

The two-and-a-half day seminar and workshop will deal with aspects of clinical nephrology that are pertinent to the community practice of internists and nephrologists. Attention will be directed to the modern role of the community specialist in the diagnosis and management of patients with acute or chronic renal failure, and in the approach to renal transplantation.

The seminar, co-sponsored by the North Carolina Heart Association, Duke University School of Medicine, and the University of North Carolina School of Medicine, will be directed by Roscoe R. Robinson, M.D., of Duke University, and Carl W. Gottschalk, M.D., and Louis G. Welt, M.D., both of the University of North Carolina.

Attendance for the course will be limited to 175, with registration fees of \$60 for Council members and \$85 for non-members.

Registration forms may be obtained from Dr. Alfred M. Bennett, American Heart Association's Department of Councils and International Program, 44 E. 23rd Street, New York, N. Y. 10010.

* * *

NEWS NOTES

Dr. Reeve H. Betts, New York and Tenafly, N. J., who has been medical secretary in the World Division of the United Methodist Board of Missions since 1966, has resigned to become chief of the pulmonary service at the Veteran's Administration Hospital in Asheville.

Dr. Betts for the last five years has had responsibility for the World Division's relationships with

United Methodist medical work around the world including some 40 hospitals, 80 clinics and dispensaries, and other projects. He has worked in the training of indigenous medical personnel, in public health programs and preventive medicine, and in coordinating health care for some 1,300 missionaries.

* * *

Two North Carolina physicians have completed nine weeks of specialized study at the U. S. Air Force School of Aerospace Medicine at Brooks Air Force Base in Texas.

They are Dr. Robert H. LeGrand, Jr. (Captain) of Greensboro and Dr. Allan B. Harvin (captain) of Raleigh. Both are graduates of the Bowman Gray School of Medicine of Wake Forest University in Winston-Salem.

* * *

AMERICAN ACADEMY OF GENERAL PRACTICE

The American Academy of General Practice, national association of family physicians, now will become known as the American Academy of Family Physicians.

The action to change the name, which will take a year to develop fully, was taken by the Academy's Congress of Delegates in the final session of the group's annual meeting held in San Francisco in September. It immediately preceded election of Dr. J. Jerome Wildgen, Kalispell, Mont., as president-elect.

According to Mac F. Cahal, executive director, the change of the name was an important step in the continuing move to revitalize the nation's primary health care forces.

New Blue Cross Book Gives Fresh Look at Lives and Problems of Middle-Aged

Adolescents and others of the under-30 generation are in the spotlight today, demonstrating and rebelling against the "Establishment." Senior citizens, too, are the objects of frequent public concern. But little attention is paid to America's perhaps most important and least understood generation: the middle-aged.

To help correct this oversight, Blue Cross has just published a 100-page book, "Generation in the Middle," which presents an original, fresh look at the life styles, attitudes, and physical, emotional and other characteristics and needs of the 50 million Americans between the ages of 40 and 65.

Contributors to the book, which is available free from North Carolina Blue Cross and Blue Shield, Inc., include 13 of the nation's leading health and medical writers, psychologists and social critics, among them former "Harper's" editor Russell Lynes.

Professional consultant for the book was Charles G. Roland, M.D., of the Mayo Clinic.

Illustrated in four colors, "Generation in the Middle" is the fifth in the series of public health education books, published by the Blue Cross Association. Recent titles in the series have been "The Modern Baby" and "Adolescence for Adults."

Book Review

Ten Books of Surgery with the Magazine of the Instruments Necessary For It. By Ambroise Pare. Translated by Robert White Linker and Nathan Womack. 264 pages. Price, \$10.00. Athens, Georgia: The University of Georgia Press, 1969.

One does not have to have too deep a knowledge of medical history to have heard of Ambroise Pare, the tough little barber surgeon who defied the medical establishment of his day and through pure virtue and hard work, won a permanent place among the greats of surgery. That he managed to survive his humble origins, his religious dissent, and his fights with the medical faculty would alone be remarkable, but the fact remains that he brought a realistic approach to his medical practice which was rare in his time and which is reflected in this little bargain volume. Linker and Womack have produced the first English translation of Pare's "Ten Books," stimulated by a 1954 edition owned by the medical library at the University of North Carolina. They have left in the translated text some vulgarisms which suit the way Pare wrote and thought, and certainly add to the charm of the volume.

After the usual flourishes of introduction come the ten books, which include such titles as "On the Wounds Made by Arquebuses," "The Method of Treating Burns" and "On the Hot Pisses," with a series of woodcuts illustrating instruments at the close of the volume. The common sense and kindness for which Pare was famous is everywhere evident in this work. He quickly debunked the idea that bullet wounds are somehow poisoned. He advocated the use of ointments for wounds, said to be one of his great contributions. He even turned his attention to the surgeon's conduct, saying "For the surgeon with pileous face renders the wound of his patient venomous."

This attractively made little book is recommended to anyone with an interest in the history of medicine—not to surgeons only. Much of the material might lie in that field, but the essence of the book has universal appeal.

Snake-Bitten Vietnamese Girl Saved by Wyeth Serum

Bites on the head by poisonous snakes are almost always fatal—especially in children. Nevertheless, a 12-year-old South Vietnamese girl who was recently bitten on the bridge of the nose by a bamboo viper (a pit viper), was saved by treatment with Antivenin (Crotalidae) North and South American Antisnakebite Serum.

The product, produced by Wyeth Laboratories of Radnor, Pa., is the only known specific treatment for poisonous bites by most pit vipers throughout the world.

The girl was treated by Major Miguel Eisen, U. S. Army Medical Corps, who is General Surgeon at the 95th Evacuation Hospital in Da Nang, and is also in charge of the Area Snakebite Center.

In Memoriam

H. Frank Starr, Sr., M.D.

Dr. H. Frank Starr, Sr., retired vice president and medical director of Jefferson Standard Life Insurance Company, died as quietly, as he lived, at his home in Greensboro, Sept. 24, 1969.

A lifelong resident of North Carolina, Dr. Starr graduated from Jefferson Medical College of Philadelphia in 1916 and served his internship at the New York City Hospital.

He was active in practice in Badin, later coming to Greensboro to practice and serve as part time medical director of the old Southern Life and Trust Insurance Company, now the Pilot Life Insurance Company. He served in the Army Medical Corps during World War I and while in service was elected medical director of the Pilot Life Insurance Company, returning to this position at the close of the war.

Dr. Starr served the Pilot Life Insurance Company faithfully as medical director until 1945 when he was elected vice president and medical director of the Jefferson Standard Life Insurance Company.

He was a diplomate of the Board of Life Insurance Medicine, and an emeritus member of the Association of Life Insurance Medical Directors of America and the Medical Section of the American Life Convention. He was a past president of the Guilford County Medical Society and the Middle Atlantic Medical Directors Club. He was very active in the Guilford County Medical Society, Greensboro Academy of Medicine, the Medical Society of the State of North Carolina, and the American Medical Association.

Dr. Starr took an active part in the Kiwanis Club of which he was a member and was an elder in the Presbyterian Church, giving generously of his time.

He lived quietly at home, entertaining himself and others with numerous hobbies, from dog and cattle breeding to woodworking.

He is survived by his wife, Mrs. Virginia Starr, a daughter, Mrs. James Jackson, and a son, Dr. H. Frank Starr, Jr., all of Greensboro, as well as a sister, Mrs. Victor McAdams of Denver, Colorado.

Be it Resolved, therefore, That this resolution be spread among the minutes of this meeting and a copy sent to his family and to his company.

* * *

Watson S. Rankin, M.D.

The Conference of Health Directors at their meeting on September 16 passed the following resolution:

WHEREAS, Almighty God in His infinite wisdom has seen fit to call unto Himself Dr. Watson S. Rankin, and

WHEREAS, Dr. Rankin devoted his entire professional life to the service of his fellow man and was a distinguished pioneer and leader in public health in the nation, and

WHEREAS, he was the first full-time State Health Officer in the State of North Carolina and as such

brought distinction to the State in this capacity, and

WHEREAS, Dr. Rankin was a gentlemen in the truest sense of the word, therefore be it

Resolved, That the North Carolina Conference of Health Directors does hereby express its sadness as occasioned by his death, and be it further

Resolved, That this Conference be ever mindful of the example Dr. Rankin set by his life of service, and be it further

Resolved, That a copy of this resolution be sent to his widow, the State Medical Society and that a copy be kept as a permanent part of the minutes of this conference.

* * *

Henry LeRoy Izlar, Sr., M.D.

The members of the Forsyth County Medical Society as well as his many other friends and colleagues were deeply saddened by the death of Dr. Henry LeRoy Izlar, Sr., on August 27, 1970.

Dr. Izlar was born in Orangeburg, South Carolina, on August 22, 1888. He was graduated from the University of South Carolina and received his degree in medicine from the University of South Carolina. He served his internship at Roper Hospital in Charleston, South Carolina, and did graduate work at the University of Pennsylvania.

He moved to Winston-Salem in 1916 and opened his office for general practice. The following year he became the city physician and was Winston-Salem's first public school physician. He served on the staffs of both the City Memorial Hospital and the North Carolina Baptist Hospital. He was forced to retire in 1962 because of failing health.

Dr. Izlar served as vice president of the North Carolina Medical Society for one term. He was also a member of the American Medical Association and of this society. He was a charter member of the Winston-Salem Kiwanis Club.

Dr. Izlar was a member of the Home Moravian Church and was very active in his church, serving as a Sunday School teacher.

Because of his devotion to his profession, his community and his church, be it

Resolved, that on behalf of the membership of the Forsyth County Medical Society, this expression of appreciation and respect be recorded in the official

minutes of the Forsyth County Medical Society, the Archives of the Medical Society of the State of North Carolina, and that a copy be forwarded to the family of our departed colleague to convey our deepest sympathy.

Forsyth Medical Society

* * *

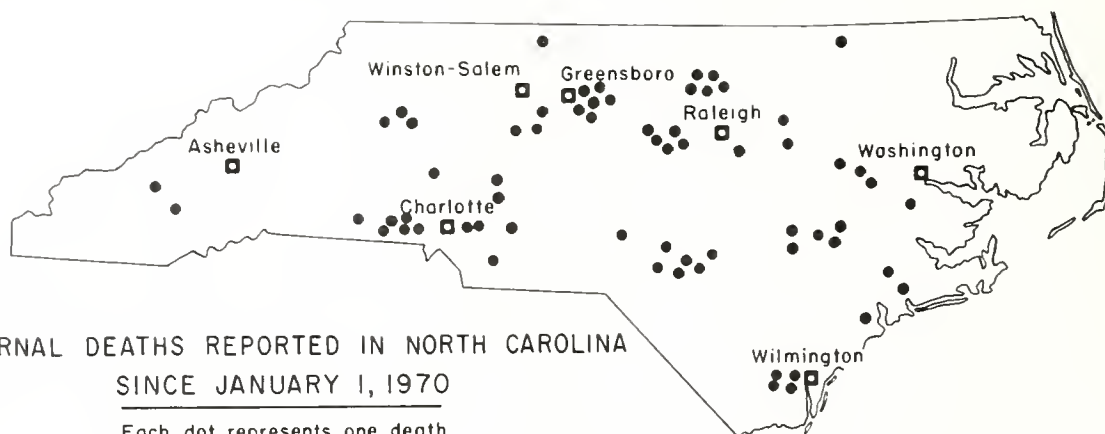
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WANTED—OBSTETRICIAN-GYNECOLOGIST for thirteen man partnership in Eastern North Carolina—looking for man to develop and direct this area of medicine within group with idea of adding OBGYN associate one year later. Staff consists of 2 surgeons, 2 internists, 2 family medicine, 1 pediatrician, 1 ophthalmologist, and 5 general practitioners. Modern clinic building with good out-patient laboratory and X-ray facilities adjacent to modern 125 bed accredited county hospital. Good partnership earnings with incentive plan for higher paying specialties. Paid vacation, sick leave, post-graduate study, auto expenses, dues, disability insurance, good retirement benefits. Starting salary \$1,800.00 per month for 6 months—full partnership in two years. Pleasant working conditions in a very harmonious group. Small town with rapid industrial growth. Variety of recreational opportunity available. Write R. M. Thomas, Mgr., Tarboro Clinic, P. O. Box 40, Tarboro, North Carolina.

Murphy General Hospital closed, all equipment for sale including 500 ma G. E. E-Ray and portable X-Ray modern lab complete, Auto-clave, Ice machine incubator, oxygen tent, O. R. Table, instruments, etc. All prices set to sell quickly. Call or write F. V. Taylor, M.D., Murphy, N. C.

Beautiful site for doctors office overlooking Lake Johnson Beltline—Franklin Road. Write Voorhees 2727 North Drive, Raleigh, N. C. 27607.



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Contraindication. History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased

intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes, a rare case of exfoliative dermatitis has been reported. Photosensitivity, onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose-related. Transient, reversible, nephrogenic diabetes insipidus with excessive thirst and polyuria (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage One tablet b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.



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Frostbite of the Extremities

JOEY M. CARTER, M.D. AND A. GRISWOLD BEVIN, M.D.*

Cold injuries have long been a major source of disability and even sometimes of death. Perhaps they have taken their greatest toll during wartime. Most of the major armies of world history have been plagued by cold injuries. Records show that, among others, Greek armies operating in western Armenia as early as the 4th century B.C., troops of the American Revolutionary War, and French armies of the Napoleonic Wars were heavily afflicted. Perhaps the earliest, most accurate description of frostbite was recorded in 1814 by Baron Larrey, Chief Surgeon of Napoleon's Grand Armee. According to Whayne and Debaeky, 90,535 cases of cold injuries occurred in the United States Army during 1942-1945.¹ The majority of these were due to frostbite.

We have since learned methods for preventing such injuries, primarily by providing adequate clothing for protection against adverse environmental situations. Even today, however, we are occasionally confronted by the problem. Two such cases seen among others at the North Carolina Memorial Hospital during the winter of 1970 are presented here to illustrate the salient pathophysiologic features as well as the mode of therapy of cold injuries to the extremities.

Case Reports

Case 1

A 35-year-old male city maintenance worker had worked for eight hours, wearing wet gloves, in a temperature of 20 degrees F. He was admitted to the North Carolina Memorial Hospital 48 hours later.

Initially, he had noted pain and numbness related to the cold; however, not until 24 hours later did his hands become markedly swollen. Examination revealed the fingertips to be cold, cyanotic, and hypesthetic. Large vesicular blebs were noted over the dorsum of both hands and the dorsal aspects of the fingers. Figure 1 shows the appearance of the hands 48 hours following initial exposure.

Upon admission some of the blebs were aspirated, and an antibiotic ointment in a water-miscible base was applied to these opened wounds. The hands were then wrapped in compressive dressings, in a functional position, and were thus maintained at constant elevation to decrease the edema. For several days thereafter superficial escharotic epidermis was debrided, revealing newly epithelialized surfaces. Daily whirlpool washes and active physical therapy were then instituted to maintain normal hand mobility. Figure 2 shows the appearance of the hands five days after injury. Only the ends of the left index, long, and ring fingers exhibited deep gangrenous changes (Fig. 3), and were surgically revised 14 days following exposure.

Case 2

A 19-year-old youth was admitted to NCMH 72 hours after exposure to temperatures of 16 to 20 degrees F for a period of approximately eight hours. He had been left at his door in an intoxicated condition and had slept through the night exposed to the subfreezing weather. Twenty-four hours later the dorsum and fingers of both hands were numb, edematous, and cyanotic.

Initially, this patient was treated in the same manner outlined for the first patient—debridement of superficial necrotic epidermis, application of antibacterial, water-miscible ointment, occlusive dressings of the hands in a position of function, and constant elevation of the hands. These dressings were changed daily and the wounds treated locally as before. The extremities were placed in whirlpool baths daily, and active and passive physical therapy of all joints was instituted. Conservatism regarding amputation was always kept in mind, and after seven days it was necessary to amputate only the right small finger at the proximal interphalangeal joint because of deep gangrene. Figure 4 shows the appearance of the hands upon admission, 72 hours following exposure. Figure 5 shows the hands completely healed, 21 days after injury.

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Pathophysiology

Cold injuries are a consequence of the combination of the intensity and duration of a cold environment, wind, and dampness. A freezing temperature is not always required; however, frostbite per se results from the formation of ice crystals in the tissues. Initially, the superficial vessels become constricted, with slowing and cooling of the venous return to the heart. A lowered central temperature ensues which stimulates further peripheral vasoconstriction. This cycle continues, producing stasis and sludging of blood with resultant tissue anoxia and biochemical changes. Frostbite causes an extracellular formation of ice crystals, creating hypertonicity of interstitial fluids and tissue. In an attempt to maintain an isotonic state, water leaves the cell, only to form more ice crystals and perpetuate this cycle until irreparable intracellular damage occurs. The cellular membranes no longer act in a selectively permeable fashion. Upon thawing, therefore, normal cellular activity is prohibited. As a consequence, massive edema of interstitial tissues and blister formation occur, the end result being cellular death.

Frostbite usually affects only the extremities, cheeks, ears, and nose. Unfortunately, the onset is unrecognized by an individual because no striking symptoms occur before cellular damage is produced. Often the only manifestation is the sudden cessation of discomfort due to cold. Not until the tissues are rewarmed is numbness then followed by stinging and pain.

Superficial frostbite involves only the skin and subcutaneous tissues, whereas deep injury involves muscles, nerves and occasionally bone. Upon rewarming of the affected parts, swelling and cyanosis are evident. Blisters form within 24 to 48 hours if the frostbite is superficial, whereas in more severe cases, this process may not develop for three to seven days. If the blisters are not ruptured, they slowly subside. The involved skin then becomes escharotic and separates in two to three weeks, leaving a reddened, extremely sensitive, newly epithelialized surface. In the more

severe cases the entire extremity may remain swollen for weeks. Gangrenous changes may develop with ensuing infection, thus requiring amputation of the involved parts.^{2,3}

Treatment

There has been much controversy regarding the different methods of treating cold injuries. Larrey postulated, from his observations, that the thawing process should be slow and prolonged in order to reduce the massive edematous reaction and subsequent gangrenous changes.^{1,4} Shumacker, in 1954,⁵ concluded from his experimental studies of rapid thawing versus prolonged cooling that animals subjected to rapid thawing exhibited less tissue damage, with a mean loss only half as great as that in control animals. On the other hand, prolonged cooling appeared to increase the resultant gangrene. Faxon¹ and others³ have recommended that frozen parts be subjected to rapid thawing in a water bath of 42 to 48 degrees F.

Most authors suggest that blebs should not be ruptured. Objection to opening the blisters is based upon the desire to prevent the development of an open, contaminated wound. However, if the blisters are unroofed early, more effective physical therapy can be applied, particularly to the hand, thus preserving function. The opened wounds are easily cared for by placing them daily in a whirlpool bath followed by application of sterile dressings, care being taken to dress the hands in a position of function. Whirlpool baths also provide a means of debridement and a medium permitting more effective motion.

Anticoagulants have been employed in the treatment of frostbite; however, they are of questionable benefit, since thrombosis, with its resulting tissue damage, has occurred many hours previously. Proponents hold that further tissue damage may be prevented by using these drugs. Sympthectomy is also of doubtful value in the early treatment of frostbite, since neurovascular damage has already occurred. If hypersensitive, causalgic symptoms develop later, sympthectomy may be of benefit then. Bedrest and elevation of the affected extremities



Fig. 1. (Case 1) Photograph showing the hands 48 hours after exposure.

Fig. 2. (Case 1) Appearance of the hands five days after injury, during the course of treatment.



Fig. 3. (Case 1) Photograph of the left hand showing only distal gangrene of the index, long, and ring fingers.



Fig. 4. (Case 2) Appearance of the hands on admission 72 hours after exposure.

are certainly indicated, and use of tobacco should be curtailed because of its effects upon peripheral vascularity.

Regarding amputation of injured tissues, conservatism in surgical procedures must be kept in mind until deep gangrenous areas become clearly demarcated. In such areas as the fingertips, preservation of deep tissue with sensation becomes critical. Early proximal amputation based upon the superficial appearance of the injury is to be avoided, because gangrenous tissue on the surface does not necessarily mean full-thickness loss. Vigorous care of wounds and frequent examination over time will help in assessing the final depth of irreversible tissue damage. Often the injury is only superficial, so that only surface tissues need debridement when epithelialization has already occurred or is occurring beneath this area.

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Fig. 5. (Case 2) Photograph of the hands taken 21 days following injury. The right small digit has been amputated at the interphalangeal joint.

Physician Management of Alcoholism

DONALD E. MACDONALD, M.B., CH.B.*

"Alcoholism is an illness characterized by preoccupation with alcohol and loss of control over its consumption such as to lead usually to intoxication if drinking is begun; by chronicity; by progression; and by tendency toward relapse. It is typically associated with physical disability and impaired emotional, occupational, and/or social adjustment as a direct consequence of persistent and excessive use."¹

This is the official AMA definition of alcoholism. Although alcoholism is now recognized as the fourth leading health problem in the United States, it was not until 1956 that the AMA issued a statement that alcoholism is indeed an illness and urged physicians to provide care and treatment for alcoholics.

For many years the treatment of alcoholism remained a neglected area of medical practice. Efforts to establish treatment centers were handicapped by the moral stigma attached to the illness, and such centers as were established dealt basically with the sobering up process of the acutely intoxicated individual and paid little regard to the social and emotional factors involved in the development of the condition.

Growth of Treatment Programs

The first significant advance in the treatment of the alcoholic was the founding of Alcoholics Anonymous in the mid-1930s; this led for the first time to an attitude of optimism with regard to the possibility of recovery for the alcoholic. This organization was formed without any ties to official medical or other professional organizations, although it is of interest that one of the co-founders was a physician.

About the same time, the Research Council on Problems of Alcoholism was organized, and in 1940 the *Quarterly Journal of Studies on Alcohol* was founded at Yale Univer-

sity. Also in the 1940s the Yale Summer School of Alcohol Studies was set up. For a number of years this summer school provided valuable training in the management of alcohol-related problems to professional and lay persons from all over the United States, until it was transferred to Rutgers University where it still continues in operation. The National Council on Alcoholism was established in 1944, and most community alcoholism programs, including approximately 30 in North Carolina, are affiliated with the National Council.

During the late 1940s and early 1950s a number of state programs were established. The North Carolina Alcoholic Rehabilitation Program came into being in 1950 with the opening of the Alcoholic Rehabilitation Center at Butner; more recently it has been designated as the Division of Alcoholism of the North Carolina Department of Mental Health, under the direction of Dr. R. J. Blackley, Deputy Commissioner. The Division of Alcoholism operates the alcoholic rehabilitation centers located at Black Mountain, Greenville, and Butner, and provides consultative services to local alcoholism programs. *Inventory*, a quarterly journal on alcohol and alcoholism, is published by the North Carolina Department of Mental Health, and a copy is mailed to each physician in the state.

The treatment of alcoholism again came to the forefront with the initiation of federally financed comprehensive mental health centers in 1963; treatment of alcoholism was included as a specific aspect of the programs of these centers. In 1965 the American Psychiatric Association issued a statement urging that community alcoholism programs be expanded, and that although the medical aspects were important, the various social and economic factors related to the development of alcoholism should not be neglected.

In the meantime, various industrial concerns had been active in establishing policies for the detection and management of the

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alcoholic employee; industry had become well aware of the "billion dollar hangover," and industrial programs have been among the more effective in the field. Many of these programs have been dependent on members of Alcoholics Anonymous to maintain their effectiveness.

The Magnitude of the Problem

In spite of the fact that physicians for many years have dealt with the medical complications of alcoholism, from acute intoxication and delirium tremens to other complications such as gastritis, esophageal varices, peripheral neuritis, pancreatitis, hepatic cirrhosis, and organic brain damage, it is likely that the physician tends to be so preoccupied with his management of these specific physical problems that he is unaware of the magnitude of the total problem of alcoholism within the community and the nation. Alcohol-related problems present themselves not only to the physician but to the clergyman, the attorney, and the courts, both in terms of domestic problems and of traffic and other offences: the parade of so-called skid row or revolving door alcoholics in Monday morning court session is a familiar sight in any large city. Business and industry are increasingly aware of the loss of time and decreased efficiency of alcoholic employees. Social agencies find that a considerable proportion of their case load comprises persons afflicted directly or indirectly with alcohol-related problems. In view of the fact that it has been estimated that each alcoholic affects five other people by his drinking behavior, this is not hard to understand.

Insurance companies are concerned about the problem of providing health and hospitalization insurance for the alcoholic, and this poses a dilemma for the hospital administrator and attending staff. It has been estimated that 30% of patients admitted to the medical services of a general hospital are suffering from physical conditions related to alcohol consumption. The drinking driver on the highway poses a threat to all citizens.

Inadequacy of the Traditional Approach

Much has been written regarding the med-

ical care of the acutely intoxicated individual including the management of delirium tremens, and this topic will not be discussed here. It would seem to be of greater importance to emphasize that the treatment of these acute physical complications does not constitute adequate treatment so far as the overall problem of alcoholism is concerned. This point is well taken in "Alcohol Problems; A Report to the Nation": "The provision of medical care, when needed, for alcohol intoxication is not treatment of the basic drinking problem. Detoxification treatment or treating the chronic physiological effects should not be confused with dealing with the drinking problem itself. Every episode of hospitalization should be used as an occasion to move the patient toward treatment for his drinking problem. This can be done only if hospital personnel are trained for this task and facilities such as inpatient rehabilitation programs and outpatient (clinic) services are available."²

One reason for the inadequacy of the traditional medical approach to the treatment of alcoholism is that only alcoholics who are relatively advanced in the progression of their illness come to the attention of the practicing physician, usually on account of some physical complication as already mentioned. The alcoholic is not usually seen by his physician in the early stages of his illness for these reasons, and so the chance of preventing the further progression of the illness is lost. A further point is that treatment of the alcoholic in isolation is almost certain to fail. An effective treatment program must include those other persons who are intimately related to the alcoholic and involved in his problems, in particular his wife, and very often his employer.³ The peculiar difficulties in management of the alcoholic patient must be recognized, including the strong tendency toward denial of the severity of the illness and the tendency to manipulate those who try to be of assistance to him. Kellermann⁴ has pointed out how the well-intentioned efforts of professional people including physicians to help the alcoholic serve often only to worsen and perpetuate his illness.

The Physician's Duty

The duty of the physician with respect to his alcoholic patient seems clear, namely, to insure that the medical needs of his patient are met in the best possible manner, including admission to a general hospital when this is necessary; at the same time, his duty is not discharged until he has made every effort to secure long-term follow-up care for his patient and those closely involved with him in his difficulties, particularly his spouse.

It should be recognized that the medical profession unaided cannot hope to deal with the manifold problems of alcoholism, which cut across the traditional lines of professional responsibility. A network of services is needed, including locally based alcoholism rehabilitation programs which can provide a range of services appropriate to alcoholic patients at whatever stage of their illness they may be. Such services would include medical care, detoxification, outpatient clinic services, partial hospitalization services, and residential centers for certain categories of alcoholics. Although physicians would be involved in some aspects of these programs, other professional persons such as psychiatric social workers, nurses, vocational rehabilitation counselors, and psychologists are necessary in providing such care, together with members of Alcoholics Anonymous. Physicians are urged to familiarize themselves with the resources which may be already available to them in their own community, and if these are inadequate, to press for the establishment of local alcoholic rehabilitation programs.

It seems desirable that treatment programs be established as independent agencies, because of the resistance of most alcoholics to utilize treatment services which are categorized as being of a psychiatric or mental health nature. The term "alcoholic," in and of itself, may be a hindrance to the appropriate management of such patients, since it becomes a pseudo-diagnosis which constitutes a block to the development of further self-awareness and exploration of the underlying emotional factors which are related to the drinking problem.⁵ It is important that the physician rid himself of

stereotyped notions concerning the meaning of the term "alcoholic." To many persons it suggests the individual with well developed physical complications including some degree of brain damage who has long since severed all his family relationships, who is leading a marginal economic existence, and who shows little or no motivation to change his mode of behavior. Such individuals in fact constitute only a small minority of the alcoholic population. Too often the physician is unaware of the prevalence of alcoholism among the young housewives, junior executives, and others who number themselves among his patients. The physician who states that he refuses to treat alcoholics is deluding himself. Being aware of his attitude, his alcoholic patients have not identified themselves as such to him.

Conclusion

In conclusion, then, the duty of the physician to his alcoholic patients may be summarized as follows:

1. Develop a high index of suspicion as to the possibility of alcoholism in every patient.
2. Regard alcoholism as a chronic illness, and anticipate periodic relapses.
3. Do not feel that your obligation to your patient has been discharged by treatment of his physical complications.
4. Refer the patient for continued long term care to an appropriate clinic or agency, especially if you lack the time or inclination to provide this long term care yourself.
5. If the alcoholic himself resists the idea of referral, by all means suggest that his wife seek counselling on her own behalf. It will be helpful to her in coping with her difficulties and it may well prove indirectly of benefit to him.

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Do We Know Enough About Drug-Packaging Hazards?

GEORGE M. SCATTERGOOD

Educators in medical colleges and even colleges of pharmacy will readily admit their present curricula are limited or utterly lacking with regard to the protective packaging needs of modern drug products.

Most physicians naturally take it for granted that the products they prescribe will be packaged by the pharmacist so as to maintain the full therapeutic value of the product until it is consumed by their patient. But busy pharmacists like busy physicians scarcely have time to read the required literature on subjects like this.

John Autian, Ph.D., Director of Materials Science Toxicology Laboratory, University of Tennessee Medical Units, has observed:

"There appears to be, in fact, a form of prior assumption that if a packaging system is commercially available the system will be quite acceptable for a drug. The pharmacist and in particular the hospital pharmacist who has been trained to perhaps the highest degree in the quality of drugs at times stops his thinking on quality when it comes to the packaging system he will use for his drugs in his pharmacy."

This quotation was directly related to the variables of plastic materials which may be indiscriminately used for drug packaging. Such plastics are readily available and, at the pharmacy dispensing level, relatively low in cost. No available stock plastic vial commonly used for dispensing solids is officially a tight container. Without regard for the type of closure, air and moisture vapor are transmitted through the styrene walls of such vials.

Of natural concern to the physician are the hidden qualities of drug products which cannot be judged until they have been ingested by the patient . . . and then only if in a given period of time they relieve or fail to relieve the condition for which the prescription was intended.

Few records are available covering those patients who have failed to respond to treatment because the medication was lacking in the full therapeutic value it was supposed to contain. Such values as were attested to by the literature of the pharmaceutical manufacturer may be fleeting if, when dispensed, the protective packaging afforded by the manufacturer is not equaled by the one who delivers the medication to the patient.

Even physicians who occasionally dispense medication for temporary relief of their patients in a paper envelope may overlook the fact that many drugs contain volatile ingredients that can quickly evaporate or otherwise lose therapeutic properties if not packaged in an air-tight and moisture-proof container.

One product possessing the most fleeting therapeutic value is nitroglycerin. Sublingual tablets of nitroglycerin are so volatile that if they are not stored in a tight container, the medication factor will literally evaporate. A careful pharmacist when dispensing a quantity of nitroglycerin tablets from a stock container will transfer the remaining shelf stock to a smaller container, because even the head space left in the original container may hold enough air to reduce the potency of the remaining tablets.

Nitroglycerin is so very low in cost that many pharmacists who receive prescriptions for 18 or 24 tablets will dispense an original package of 100 at the same price as the smaller quantity because the cost to the pharmacy would actually be less than the cost of the prescription container, the counting, and dispensing time would total. So then in such instances the responsibility for storage of the excess quantity becomes the responsibility of the patient. There are few such patients who know about product degradation hazards.

The only readily available containers for safe storage of nitroglycerin tablets are small capacity glass containers with tight polypropylene snap caps or well lined thread-

From the Kerr Glass Manufacturing Company, Lancaster, Pa.

Requests for reprints to 724 Dorsea Road, Lancaster, Pa. 17601.

ed closures. No available box, envelope, or plastic vial is officially "tight," because the container walls are permeable. Even unit dose foil or plastic packages have recently been found unfit for the packaging of nitroglycerin.

Whereas nitroglycerin is used as a prime example, this is not the only drug that requires attention to packaging and storage. Of the top 200 most frequently dispensed drugs in 1969, 52% require protection from light and 77% require tight containers. These figures were compiled from the official compendia USP and NF and for newer products from the labels and literature of the manufacturer.

The avoidance of environmental degradation hazards is obviously more important for life sustaining, pain relieving, and tranquilizing drugs than for other products. Both the physician and the patient rely upon the medicinal values assumed to be present, so it is catastrophic when these values are found wanting.

Some pharmacists have actually considered that fully protective packaging of dispensed prescriptions was not their responsibility, for several reasons. First, the official compendia USP XVII and NF XII exempted pharmacists from responsibility for light resistant containers. (This exception is being eliminated in USP XVIII and NF XIII.) The exception on this one protective packaging category caused many pharmacists to assume that a similar exception was applicable to other forms of protective packaging. Secondly, there are few pharmacists that engage in interstate commerce, so it has been erroneously assumed that FDA regulations were not applicable to individual pharmacists. However, Section 302K of the Food, Drug and Cosmetic Act clearly states, "... or if repackaged after receipt in interstate commerce." And finally the pharmacists' opinion was that the prescription was for a limited period of therapy, so protective packaging was not important since degradation would not be likely to occur in a few days or weeks.

This latter judgment for omission of adequately protective packaging may conflict

with the increasing practice of physicians to prescribe up to six months of therapeutic drugs for patients requiring sustaining medication for long periods of time, if not for life. This may be applicable both to those who can afford the larger prescription cost as well as welfare patients for which the third party total payment would be reduced by the reduction of multiple prescription fees.

To remind physicians of some of the degradation hazards affecting critical drug products, the following review may invite an awareness of these protective packaging needs:

Photolysis or photochemical degradation of products which are sensitive to light. Both sunlight and artificial light produce energy. This energy affects chemical structures. For some common products like vitamins C, B₁₂ and chlorpromazine HCl, light is utterly destructive. Light causes the simple product paregoric to develop a precipitate which may be lethal.

Hydrolysis is degradation through exposure to moisture. Many modern products are either hygroscopic or deliquescent. Moisture vapor is not alone related to geographical locations. The steam in a bathroom in any location can cause product deterioration.

Oxidation hazards exist universally and many solid products are adversely affected and lose therapeutic properties through packaging which is not air tight. Liquids may evaporate and the portion lost is usually the vehicle. This loss results in some products dangerously acquiring higher potency per dose than was intended.

Thermolysis or disassociation by heat may result in degradation of products adversely affected by normal room temperatures. Safe temperature ranges for such products are being clarified in the new USP XVIII and NF XIII.

No one could possibly expect a physician to monitor the dispensing practices of the pharmacist who dispenses the prescriptions he has written. But a physician's awareness of degradation hazards for such a large percentage of important pharmaceutical products may influence him to suggest that patients patronize a pharmacy where protective packaging needs are understood.

Some physicians are members of the Pharmacy and Therapeutic Committees of hospitals where they can exercise influence over adequately protected packaging of pre-

scriptions which are dispensed in both inpatient and outpatient categories.

Since the announcement of the important changes in the texts of the official compendia being published in 1970, which directly affect pharmacists' responsibilities, some pharmacy owners and numerous hospitals have elected to use total protective packaging for all prescriptions whether they need it or not. This means all amber glass containers with continuous thread finishes fitted with well lined continuous thread closures.

The added expense of total protective packaging is fractional, and, as the United States Public Health Service found as early as 1950, total protective packaging not only saves space and investment in duplicate inventory, but also saves the time of high priced personnel in reference to indices or other sources to determine safe packaging needs for individual products.⁴

* * *

Protective Packing Indications IV (see following pages) was compiled by George M. Scattergood from the *National Prescription Audit 1969*, the *Top Most Frequently Dispensed New and Refill Prescription Products*, data from the *United States Pharmacopeia XVIII*, the *National Formulary*, the *American Drug Index 1970*, *Pharmacy Times*, and label instructions of some manufacturers as of April 24, 1970. It was officially released May 18, 1970, by the Kerr Glass Manufacturing Corporation (producers of the Armstrong Rx Container Line), Packaging Products Division, Pre-

scription Container Department, Lancaster, Pa., 17604.

Of the top 200 most frequently dispensed drugs for the year 1969, eighty-one are all or in part listed in NF XIII, 107 are all or in part listed in USP XVIII. Seven drugs are listed in earlier editions of the compendia, as noted, but do not appear in the latest editions. Three combination products are in part listed in both USP and NF. Two products are listed as "new" and have not as yet been accepted by either official compendium.

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Protective Packaging Indications IV

Kerr Glass Manufacturing Corporation Prescription Container Department
Protective Packaging Supplement to the report of:
R. A. Gosselin and Company, Inc.

700 Providence Highway, Dedham, Massachusetts
National Prescription Audit 1969

200 Leading Drugs—66.35% of all new prescription & refills dispensed in 1969
As Published by Pharmacy Times, April, 1970

**Products which in total or for one or more
ingredients are known to require protective packaging.
Other products requiring only "well closed" containers
and some products for which packaging needs are not of record.
Index researched as of May 13, 1970**

P. P. 1. Statistics

- 104 Require protection from light (52%)
- 154 Require "tight" containers (77%)
- 90 Require both light and tight packaging protection (45%)
- 31 Have no published packaging needs other than "well-closed" or such needs are not of record. (15%)

Abbreviations

USP—United States Pharmacopeia XVIII
NF—National Formulary XIII
New—New or unlisted in compendia
ML—Protective instruction on manufacturer's label
Note: In the year 1968 the top 200 products dispensed on new and refilled prescriptions totaled 761,915,423.

N.D.C.	Product	N.D.C.	Manufacturer	New or Compendia	Requires Light Protection	Requires Tight Protection
	"Achrocidin"	5	Lederle	USP	x	x
	"Achromycin"	5	Lederle	USP	x	x
	"Achromycin-V"	5	Lederle	USP	x	x
81-0019	"Actifed"		Burroughs Wel.	NF	x*	x
81-0024	"Actifed C" Expectorant		Burroughs Wel.	NF	x*	x
85-0APM	"Afrin"		Schering	USP		x
14-1011	"Aldactazide"		Searle	USP	x	x
6-0401	"Aldomet"		M.S.D.	USP	x ML	x ML
	"Aldoril"		M.S.D.	USP	x ML	x ML
	"Alertonic"		Merrell	NF XII	x ML	x
71-1231	"Ambenyl" Exp.		Parke Davis	NF	x	x
	"Ampicillin"		Unspecified	USP		x
	"Antivert"	49	Roerig	USP		
	"Aristocort"	5	Lederle	NF		
75-9071	"Arlidin"		USV Pharm.	NF		x
	"Artane"	5	Lederle	USP		x
	"Atarax"	49	Roerig	NF		x
	"Atromid-S"		Ayerst	NF	x	x ML
46-1000	"Auralgan"		Ayerst	NF		x
4-0012	"Azo-Gantrisin"		Roche	NF	x	x
	"Benadryl"	71	Parke Davis	USP	x	x
68-0118	"Bendectin"		Merrell	USP	x	x ML
71-1195	"Benylin" Expectorant		Parke Davis	USP	x	x ML
	"Biphetamine"	18	Strassenburgh	NF		
28-0014	"Butazolidin"		Geigy	NF XII		x ML
28-0002	"Butazolidin Alka"		Geigy	NF XII	x	x
	"Butisol Sodium"	45	McNeil	NF		x
	"Carbrital"	71	Parke Davis	NF XI		x
	"Chloral Hydrate"		Generic	USP		x
	"Chloromycetin"	71	Parke Davis	USP		x
	"Chlor-Trimeton"	85	Schering	USP-NF	x	x
7-0C26	"Combid"		S.K.F.	USP	x	x
	"Compazine"	7	S.K.F.	USP	x ML	x
	"Compocillin-VK"	74	Abbott	USP		x ML
	"Co-Pyronil"		Lilly	NF	x	x

*Manufacturer's letter July 1969.

N.D.C.	Product	N.D.C.	Manufacturer	New or Compendia	Requires Light Protection	Requires Tight Protection
	"Cordran"	2	Lilly	NF	x	x
	"Cortisporin"	81	Burroughs Wel.	USP	x	x
	"Coumadin"	56	Endo	USP	x	
2-0W56	"C-Quens"		Lilly	NF		
	"Crystodigin"	2	Lilly	USP		x ML
	"Cytomel"	7	S.K.F.	USP		x
	"Darvon"	2	Lilly	USP		x ML
2-0H05	"Darvon Compound"		Lilly	USP		x ML
2-0H06	"Darvon Compounds-65"		Lilly	NF		x ML
75-9611	"DBI-TD"		USV Pharm.	USP		x ML
	"Decadron"	6	M.S.D.	NF	x ML	x ML
	"Declomycin"	5	Lederle	NF	x	x
	"Demerol"	24	Winthrop	USP	x	
74-3991	"Desbutal"		Abbott	USP	x	x
	"Dexamyl"	7	S.K.F.	USP-NF		x
	"Dexedrine"	7	S.K.F.	USP		
	"Diabinese"	69	Pfizer	USP		
	"Digtoxin"		Generic	USP		
	"Digoxin"		Generic	USP		x
71-0362	"Dilantin Sodium"		Parke Davis	USP		x
	"Dimetane"	31	Robins	NF	x	x
31-2224	"Dimetapp"		Robins	NF	x	x
	"Diupres"	6	M.S.D.	NF-USP	x ML	x ML
	"Diuril"	6	M.S.D.	NF	x ML	x ML
	"Donnatal"	31	Robins	NF	x	x
	"Doriden"	83	Ciba	NF		
	"Dramamine"	14	Searle	USP		
	"Drixoral"		Schering	NF	x	x
7-0E90	"Dyazide"		S.K.F.	USP	x	x
	"Elavil"	6	M.S.D.	USP	x ML	
	"Empirin Compound w/Codeine"	81	Burroughs Well	USP	x ML	x ML
	"Enovid"	14	Searle	USP		
14-0131	"Enovid-E"		Searle	USP		
8-0005	"Equagesic"		Wyeth	USP XVI		x ML
	"Equanil"	8	Wyeth	NF		x
	"Erythrocin"	74	Abbott	NF	x ML	x ML
	"Esidrix"	83	Ciba	USP		
7-0J66	"Eskatrol"		S.K.F.	USP	x	x
	"Feosol"	7	S.K.F.	USP		
	"Fiorinal"	78	Sandoz	NF		x ML
14-1801	"Flagyl Oral"		Searle	USP	x	
	"Furadantin"	35	Eaton	USP	x	x
	"Gantanol"	4	Roche	NF	x	
	"Gantrisin"	4	Roche	USP	x	x
	"HydroDiuril"	6	M.S.D.	USP	x ML	
	"Hydropres"	6	M.S.D.	USP	x ML	x ML
	"Hygroton"	28	Geigy	USP		
	"Ilosone"	2	Lilly	NF		x ML
	"Indocin"	6	M.S.D.	NF	x ML	x ML
	"Isopto Carpine"	65	Alcon	USP	x	x
	"Isordil"	82	Ives	New		x ML
24-0J78	"Isuprel Mistometer"		Winthrop	USP	x	x
	"Kenalog"	3	Squibb	NF		
	"Lanoxin"*	81	Burroughs Wel.	USP		x
39-0060	"Lasix"		Hoescht	USP	x ML	
4-0007	"Librax"		Roche	NF	x	x

*Tablets only, manufacturer's letter July 1969.

N.D.C.	Product	N.D.C.	Manufacturer	New or Compendia	Requires Light Protection	Requires Tight Protection
	"Librium"	4	Roche	NF	x	x
	"Lincocin"	9	Upjohn	USP		x ML
	"Lomotil"	14	Searle	NF	x ML	x ML
	"Maalox"		Rorer	USP		x
	"Macroclantin"		Eaton	USP	x	x
	"Mandelamine"	47	Warner-Chilcott	USP		
	"Medrol"	9	Upjohn	NF	x	x
	"Mellaril"	78	Sandoz	USP	x ML*	x
	"Meproamate"		Generic	NF		x
	"Miltown"	37	Wallace	NF		x
	"Mycolog"	3	Squibb	USP		
	"Mycostatin"	3	Squibb	USP	x	
	"Mylanta"	38	Stuart	NF	x	
	"Mysteclin-F"	3	Squibb	USP-NF		x
	"Naldecon"	15	Bristol	USP	x ML	x ML
	"Nembutal"	74	Abbott	USP		x
	"Neo-Decadron"	6	M.S.D.	NF	x	x
	"Neosporin"	81	Burroughs Wel.	USP	x	x
	"Nicotinic Acid"		Generic	USP XVI		x
	"Nitroglycerin"		Generic	USP		x
	"Noctec"		Squibb	USP		x ML
	"Noludar"	4	Roche	NF	x	x
89-0235	"Norgesic"		Riker	NF	x	x
	"Norinyl"	33	Syntex	NF		
	"Norlestrin 20"	71	Parke Davis	NF		
183-1002	"Novahistine"	183	Pitman-Moore	USP	x	x
	"Novahistine DH"		Pitman-Moore	USP	x	x
	"Omnipen"	8	Wyeth	USP		x ML
87-0575	"Oracon"		Mead Johnson	USP	x	x
9-0100	"Orinase"		Upjohn	USP		
7-0N23	"Ornade"		S.K.F.	NF	x	x
	"Ortho-Novum"		Ortho	NF	x	
	"Ortho Novum 1/80-21"		Ortho	NF		
8-0056	"Ovral"		Wyeth	USP	x	x
	"Ovulen 20"	14	Searle	USP	x	
	"Ovulen 21"	14	Searle	USP	x	
9-0550	"Panalba"		Upjohn	NF		x
	Paregoric		Generic	USP	x	x
88-1555	"Pavabid"		Marion	NF	x	x
	"Pediamicin"		Ross	NF		x ML
	"Penbritin"	46	Ayerst	USP		x ML
	Penicillin G Potassium		Generic	USP		x
	"Pentids"	3	Squibb	USP		x ML
	"Pen-Vee-K"	8	Wyeth	USP		x ML
	"Periactin"		M.S.D.	NF	x ML	x ML
	"Peritrate"	47	Warner-Chilcott	NF	x ML	x ML**
47-4004	"Peritrate-SA"		Warner-Chilcott	NF		x ML
56-0122	"Percodan"		Endo	New		x ML
	"Phenaphen w/Codeine"	31	Robins	USP	x	x
	"Phenergan"	8	Wyeth	USP	x ML	x ML
	"Phenergan Exp."		Wyeth	USP	x ML	x ML
	"Phenergan Exp. w/Codeine"		Wyeth	USP	x ML	x ML
8-0047	"Phenergan VC" Exp.		Wyeth	USP	x ML	x ML
8-0048	"Phenergan VC" Exp.					
	w/Codeine		Wyeth	USP	x ML	x ML
	Phenobarbital		Generic	USP		

*Only Mellaril Concentrate.

**ML applies only to "Peritrate" w/Nitroglycerine.

N.D.C.	Product	N.D.C.	Manufacturer	New or Compendia	Requires Light Protection	Requires Tight Protection
	"Placidyl"	74	Abbott	NF	x	x
	"Polycillin"	15	Bristol	USP		x ML
	Prednisone		Generic	USP		x
	"Preludin"	28	Geigy	NF		x
	"Premarin"	46	Ayerst	USP		x
	"Pro-Banthine"	14	Searle	USP		
	"Proloid"	47	Warner-Chilcott	USP		x*
	"Provest"	9	Upjohn	USP	x	x
	"Pyribenzamine"	83	Ciba	USP	x	
	Quinidine Sulfate		Generic	USP	x	
	"Raudixin"	3	Squibb	NF	x	x ML
	"Regroton"		Geigy	USP		
28-0028	"Renese"	69	Pfizer	NF	x	x
	Reserpine		Generic	USP	x	x
	"Ritalin"	83	Ciba	NF XII		x
	"Robitussin"		Robins	NF		x
15-5425	"Salutensin"		Bristol	NF		x ML
	"Seconal Sodium"	2	Lilly	USP		x ML
83-0071	"Ser-Ap-Es"		Ciba	USP	x	x
	"Serax"	8	Wyeth	NF		
	"Serpasil"	83	Ciba	USP	x	x
	"Stelazine"	7	S.K.F.	NF	x ML	x ML
	Stilbestrol		Generic	USP	x	x
	"Sudafed"		Burroughs Wel.	NF	x ML	x
	"Sumycin"	3	Squibb	NF		x
	"Synalar"	33	Syntex	NF		
	"Synthroid"	48	Flint	USP		x
	"Talwin"		Winthrop	NF	x	x
28-0024	"Tandearil"		Geigy	NF		x
	"Tedral"	47	Warner-Chilcott	NF		x
	"Teldrin"	7	S.K.F.	USP	x	x
	"Tenuate"	68	Merrell	NF	x	x ML
	"Terramycin"	69	Pfizer	USP	x	x
	Tetracycline HCL		Generic	USP	x	x
	"Tetracyn"		Roerig	USP	x	x
	"Tetrex"	15	Bristol	NF	x ML	x ML
15-4348	"Textrex APC w/Bristamin"		Bristol	USP	x ML	x ML
	"Thorazine"	7	S.K.F.	USP	x ML	x
	Thyroid	53	Armour	USP		x
	Thyroid		Generic	USP		x
	"Tigan"	4	Roche	NF		
	"Tofranil"	28	Geigy	NF XII		x
	"Triaminic"	43	Dorsey	NF	x	x
	"Triavil"	6	M.S.D.	NF-USP	x ML	x ML
	"Tuinal"	2	Lilly	NF		
	"Tuss-Ornade"	7	S.K.F.	USP	x	x
	"Tylenol"	45	McNeil	NF	x	x
85-00FE	"Valisone"		Schering	NF		
	"Valium"	4	Roche	NF	x	x
	"Vasodilan"	87	Mead Johnson	NF		x
	"V-Cillin-K"	2	Lilly	USP		x ML
	"Vibramycin"	69	Pfizer	USP	x	x
	"Vioform					
	w/Hydrocortisone"	83	Ciba	USP		
	"Vistaril"	69	Pfizer	NF		x
	"Zyloprim"		Burroughs Wel.	USP		

*Contains thyroid USP

Mixed Mesodermal Tumors

Report of a Case

JAMES B. GLOVER, M.D.

Mixed mesodermal tumors are highly malignant neoplasms that arise from the uterus. They are composed of mesodermal elements from the endometrial stroma as well as epithelial components from the endometrial glands.¹ The microscopic structure varies, and may contain areas of adenocarcinoma, squamous-cell carcinoma, poorly differentiated carcinoma, and sarcoma. Areas of adenomatous hyperplasia may be present. The sarcomatous element varies, and may include rhabdomyosarcoma, osteogenic sarcoma, chondrosarcoma, and other forms.

Case Report

A 54-year-old married white woman, para 1-0-0-1, was admitted to Wilson Memorial Hospital on March 27, 1968, complaining of abdominal pain of two weeks' duration and vaginal bleeding for the past year. During the year she had received various hormonal preparations for the bleeding.

The physical examination was unremarkable except for the pelvic findings. The cervix was effaced and dilated 3 to 4 cm. Protruding through the cervix was a hemorrhagic, necrotic mass. The uterus was irregular and two to three times larger than normal. The adnexae were not remarkable.

Results of laboratory studies, including serial films of the gastrointestinal tract, were normal. Papanicolaou smears were negative. Biopsy revealed necrotic tissue.

A laparotomy disclosed a tumor extending through the serosa of the uterus, with implants on the pelvis and the large and small bowels. A total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed. The patient's immediate postoperative course was benign. Twenty days after the operation, however, she had symptoms

and signs of partial obstruction of the bowel. On exploration it was found that the tumor extended through the fascia, with implants over the entire abdomen and pelvis. Cytoxan, 10 mg/kg, given intravenously for four days postoperatively, produced subjective improvement. The patient was discharged on a regimen of cytoxan, 150 mg daily, and followed with blood studies. Over the next four weeks she followed a progressively downhill course and expired nine weeks after the initial treatment.

Pathology

Gross examination: The uterus measured 15 by 9 by 7 cm, the cervix measured 8.5 cm, and the external os approximately 5 cm in greatest diameter. Protruding from the external cervical os was a globular mass of necrotic yellowish-tan and green soft tissue, adhering to the surface of the endocervical canal and filling the canal. The endometrial canal also contained tumor. The tumor appeared to be superficial and to arise diffusely in the endometrium. It tended to produce pedunculated polypoid structures measuring approximately 3 cm in greatest diameter. The tumor was somewhat mucoid and appeared homogenous on cut section.

Microscopic examination: The histologic pattern of the tumor in the uterus was striking. There was an epithelial component of adenocarcinoma characterized by irregular, branching, back-to-back glands lined by somewhat pleomorphic columnar cells. The cells were poorly oriented to each other, and the cytoplasm was strongly eosinophilic. There were large areas of undifferentiated carcinoma resembling poorly differentiated epidermoid carcinoma, but the diagnostic characteristics such as dyskeratosis, pearl formation, intercellular bridges, and pseudopalisading, such as is seen in the basal-cell layer of the epidermis, are lacking. A definite fibrosarcoma-like pattern composed of spindle-shaped cells was prominent in cer-

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Request for reprints to 629 Trinity Drive, Wilson, N. C. 27893.

tain areas of the tumor. Other features such as chondrosarcoma, liposarcoma, osteosarcoma, rhabdosarcoma, and leiomyosarcoma were lacking. The tumor invaded the myometrium superficially. Some necrotic tissue was scattered throughout the less differentiated portions of the specimen.

Discussion

Terminology: Mixed mesodermal tumors were first described by Wagner in 1854. Since that time many single and collected case reports have appeared. McFarland² collected 199 different terms in a review of 516 references. Many authors believe that carcinosarcoma and mixed mesodermal tumors should be classified as separate entities depending on the histologic appearance,³ the difference being that the mesodermal component of the carcinosarcoma is the malignant counterpart of normal uterine tissue, whereas the mixed mesodermal tumor has mesodermal elements which have no benign counterpart in the uterus.⁴ Woodruff⁵ discussed the subgroups with regard to pathologic, clinical, and physical characteristics. He concluded that subclassification is unwarranted, an opinion which most authorities share.

Origin: The origin of the tumor is debated, as implied by the varying terminology. Wilmer⁶ suggested that it arises from embryonic mesodermal arrest cells. However, most authors believe that it stems from metaplasia of the endometrial stroma, which contains the least highly specialized cell type derived from the mullerian mesenchyme.

Pathology: Grossly, the tumor is polypoid, with a broad base. It appears necrotic, hemorrhagic, and friable. As stated previously, the microscopic picture varies and may include epidermoid carcinoma, adenocarcinoma, anaplastic carcinoma, and sarcoma.

Symptoms and diagnosis: Mixed mesodermal tumors comprise from 2 to 5 % of all malignant uterine tumors.⁷ The majority occur in menopausal or postmenopausal women. Some authors report an increased incidence in nulliparous women (40%) and

previously irradiated patients (12%). The most common symptoms are bleeding (80%) and pain.¹ The uterus is usually enlarged. The cervix may be effaced and dilated, with a protruding necrotic mass. The diagnosis may be difficult to reach on biopsy—in less than 30% of the cases in some series.

Treatment: The treatment varies. It has included surgery, radiation, and chemotherapy, depending upon the findings at laparotomy.⁷ The usual treatment is total abdominal hysterectomy, with bilateral salpingo-oophorectomy.⁸ More extensive surgery has been employed. Most oncologists agree that the tumor is radioresistant, although isolated cases appear to improve.¹ Chemotherapy has been disappointing.⁸

Prognosis: The prognosis appears to depend on early diagnosis and depth of penetration. The outlook is usually grim. The five-year survival rate is extremely low, averaging 7 to 19 months in most series.

Summary

Mixed mesodermal tumors are highly malignant tumors of the uterus, carrying a poor prognosis. The preoperative diagnosis is difficult, and the outcome depends on the extent of the lesion. Much confusion still surrounds their origin and terminology.

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DECEMBER, 1970

POLLUTION—GOOD OLD TIMEY STYLE

There are some who regard the internal combustion engine as the handiwork of the devil, and are glad to discuss the matter while riding to work. There is good reason to worry about it, and no attempt will be made to put exhaust pipes in the same camp as chlorophyll. But would a return to the horse-and-buggy era really make things a lot better? Lots of people now alive and complaining have never been around horse-drawn vehicles, and get their impressions from movies

and TV, where some of the impact is lacking; they forget that horses, like autos, have pollution-producing rear ends.

These thoughts came to mind during a brief pilgrimage to the William Beaumont Memorial maintained by the Michigan Medical Society on Mackinac Island, just below the fort in which Dr. Beaumont served and made his pioneer observations on Alexis St. Martin's gastric mucosa. The island years ago banned internal combustion vehicles, and the travel authorities of the area tout the island as a great place for walking tours. They have a guide book with a number of such tours outlined. The trouble is that many visitors are apparently too feeble to walk, and for them carts are available, drawn by pairs of horses a brewery would be glad to claim. Business is very good, hence the streets are liberally bestrewn with horse apples, and the air is thick with the flies which find themselves in fly heaven. Downtown there are people employed to keep the paved street relatively clean, but a short distance away dust and feces mix to provide a truly old-timey experience. A lot of shoeless teenagers were looking a bit squeamish as they tramped along, and amid the buzz of the flies the complaints of children could be heard (that is, ones aside from the usual, and directed at horse manure), and it was apparent that a page from the past was being appreciated in a way impossible to get vicariously. It is to be hoped that a goodly supply of tetanus immunization material is kept on hand, lest Beaumont's ghost switch fields of interest.

• • •

DIPHTHERIA

When the antibiotic era arrived in full vigor at the close of World War II, the imminent demise of most infectious diseases was predicted, and there was a subtle decline of interest in them among some physicians. Twenty-five years later disease continues to be produced in great quantities by biologic agents, and no one with a sense of history is ready to write any of them off. Syphilis, gonorrhea (nearly 2000 cases in North Carolina in August), and many common bacterial infections are still here, treat-

able perhaps, but here. Now diphtheria has created a major public health problem in San Antonio, provoking great anxiety among its citizens, and well-founded anxiety at that.

For some years now it has seemed that a diphtheria epidemic would be possible, especially among adults. Immunization of children has by and large been thorough, but among adults boosters are uncommon for this ailment, even though it is no more trouble to give an adult booster DT dose. Hence we have been building a reservoir of potential victims, and in this disease the

help we might get from antibiotics is not as great as one would wish. The carrier rate has not been shown to have diminished, so a source of organisms is still at hand. Perhaps the scare from San Antonio will provoke physicians and public health authorities to greater efforts in keeping up the diphtheria immune status of the adults inherited from good childhood immunization programs, as well as to bring immunization to those less fortunate children who still don't get it.

Correspondence

NORTH CAROLINA PHYSICIANS' INTEREST IN PHYSICIANS' ASSISTANTS

To the Editor:

During the summer of 1970 the following questionnaire was mailed to all North Carolina physicians.

1. Do you feel there is a need for this type of personnel?
2. Do you think you would be interested at some time in employing a physician's assistant?
3. If your answer to No. 2 is "yes," would you want a physician's assistant within the next two years?—or some time later than two years?
4. Check your specialty practice:
Family physician
Pediatrics
Surgery
Medicine
Obstetrics & Gynecology
Other, specify
5. Location of practice
6. Signature (optional)

The questionnaires mailed totaled 3,825, of which 25 were returned (deceased, retired, or no longer residents of the state). Thus, out of 3,800 questionnaires, 2,025 were answered (53.3%).

Eighty-two per cent indicated that there

was a need for physicians' assistants. Forty-two per cent indicated they would employ a trained physician's assistant, of which 46% would employ within two years, 44% would employ later than two, and the remainder were undecided or did not specify.

The following specialties indicated the greatest interest: Pediatric responses indicate that 55% (80) were interested in employing a physician's assistant; surgery and surgical subspecialties, 45% (216); family practice, 44% (238); obstetrics and gynecology, 42% (82).

While this survey indicates a high percentage of interest, it is difficult to make any reliable predictions for the future since many physicians do not really understand how a physician's assistant functions in a practice situation. The only conclusion that can be drawn is that there is a considerable amount of interest among North Carolina physicians in the Physician's Assistant Training Program.

Lee Powers, M.D.
Director

Division of Allied Health
Programs

Bowman Gray School of Medicine
Winston-Salem

Committees & Organizations

COMMITTEE ON SOCIAL SERVICE PROGRAMS (INCLUDING MEDICAID)

Charles Wilkerson, M.D.—Chairman
Mid Pines Club, Sept. 24, 1970

This Committee on Social Service Programs believes that a problem has arisen in the Medicaid program wherein those persons eligible for Medicaid and in need of psychiatric services are unable to receive these services under the current rules and regulations governing the Medicaid program in North Carolina, and that the psychiatrists are apparently, under some circumstances, ineligible for participation in this program. This Committee urges the Executive Council to make a study of the problem in order to make recommendations for its solution to the State Department of Social Services.

The Committee endorsed the resolution on Peer Review and urged the President to implement it as soon as possible.

On reviewing the recommendations of the Subcommittee on Medicaid Utilization of the Advisory Committee on Medical Assistance, the Committee on Social Services adopted the following:

1. It is recommended that the Committee go on record as favoring the state's taking over the non-federal share of the cost of the Title XIX program, thus eliminating any financial responsibility on the part of the county for this program.

2. The Committee recommends that the Department of Social Services be requested to move expeditiously, in consultation and cooperation with the State Board of Health, North Carolina Blue Cross and Blue Shield, and the various vendor groups, to develop a more effective plan of utilization review and more efficient and economical methods, to the end that the program may serve effectively and efficiently those covered by it.

3. The Committee recommends that program utilization and funding be given full attention before any reduction in the scope of the program is considered, and that the Committee view with concern any reduction in the scope of the services provided.

4. The Committee recommends that it advocate that a mechanism be developed within the limitations of the present federal law to establish a method of co-payment for the medically indigent group utilizing the program, and it proposes that consideration be given to changes in the federal law that would permit states flexibility in utilizing the co-payment mechanism.

The following recommendation was made in response to a report of action by the Executive Council at the May 17 meeting regarding medical review teams to review all recipients coming to welfare rolls for medical purposes:

The Committee recommends that, through the Executive Council, the Medical Society of the State of North

Carolina suggest to the State Department of Social Services the following guidelines in the determination of disability of applicants for medical service under the Medicaid program:

That a panel of three practicing physicians in each county be established to examine welfare applicants who are applying for medical treatment under the Title XIX program;

That those physicians be paid by the Social Service Department for this service;

That the panel of physicians should be selected by the county medical society and the county superintendent of welfare;

That a record be kept of the statistics of the panel and that this record be made public;

That the examining committee should make a report of recommendations so far as each recipient is concerned, and each determination should be final, provided, however, that there should be some recourse by the recipient or the welfare department.

* * *

INSURANCE INDUSTRY COMMITTEE

A. J. Dickerson, M.D.—Chairman
Mid Pines Club, Sept. 23, 1970

Regarding the problem of concurrent care, the Committee agreed on the following tentative draft of a policy statement:

A. The primary attending physician is the one who admits, attends, and discharges the patient. He remains the primary physician until or unless care is transferred to another physician and this transfer is documented by a written order on the chart.

B. The consultant should be compensated generally on the basis of consultation services in cases involving non-surgical care when the scope of his services falls within the scope of services usually rendered by the primary physician.

C. The Committee recognizes that complex or unusual problems even within the scope of such similar services may entitle the consultant to additional and/or unusual payment.

It was the consensus of this Committee that the above policy statement be adopted as official State Medical Society policy and this information be transmitted to the Society membership by the best method determined by the Executive Director.

* * *

COMMITTEE ON MEDICARE

John Glasson, M.D.—Chairman
Watts Hospital, Durham, Oct. 21, 1970

The Committee unanimously approved the following action:

This Committee, having reviewed physicians' charges data, submitted by Prudential representatives, concurs that there should be three charge pattern groupings within the State of North Carolina, in accordance with the established rules and regulations for administering the Medicare Law.

COMMITTEE ON COMMUNITY MEDICAL CARE

J. Kempton Jones, M.D.—Chairman
Southern Pines, Sept. 26, 1970

Following reports from the three medical schools in the state—Duke, Bowman Gray, and UNC—the Committee adopted the following resolution:

Whereas the Medical Society of the State of North Carolina has encouraged the medical schools to promote educational programs in private practice in communities, and whereas the three medical schools in the state have responded now by the development of departments in community and family practice of medicine, therefore the Committee on Community Medical Care

- I. A. Requests the Executive Council to commend the deans of the medical schools on the development of the departments that have been initiated so far
- B. Requests that they give highest priority to the continued support and further development of these departments in the medical schools.
- II. The Committee on Community Medical Care served to work with the three departments of community medicine in facilitating development with physicians in the community.

The Committee recognized that the community hospital can play a vital role in the development of community practice affiliations with medical schools, and we request that negotiations or discussions with the North Carolina Hospital Association in the definition of their role in this regard.

Bulletin Board

NEW MEMBERS OF THE STATE SOCIETY

Russell Carl Taylor, M.D., P. O. Box 175, Banner Elk
Jerome Ruskin, M.D., 1001 N. Elm Street, Greensboro
Paul Geniec, M.D., OTOL, 318 Westwood Avenue, High Point

Sae Soon Lee, M.D., P. O. Box 110, Morganton
Bennett Rudolph Creech, M.D., 5220 Partridge Drive, Durham

Drew Charles Hunsinger, M.D., Pd, 707 Professional Dr., New Bern

Ward Landis Voigt, M.D., S, 624 Quaker Lane, High Point

Joseph Clarence Farmer, Jr., M.D., Dept. of Surgery, Duke University Medical Center, Durham

Alan Duane Whanger, M.D., P, 3316 Dixon Road, Durham

John Calhoun Graham, Jr., M.D., R, 803 Emory Drive, Chapel Hill

* * *

NEWS NOTES FROM THE UNIVERSITY OF NORTH CAROLINA DIVISION OF HEALTH SCIENCES

UNC Chancellor J. Carlyle Sitterson has announced the resignation of Dr. Isaac M. Taylor, dean of the

University School of Medicine.

Dr. Taylor will continue in his present capacity until June 30, the announcement said.

After a six month leave of absence (beginning July 1) he plans to return to teaching in the Medical School's Department of Medicine, a position he held at the time of his appointment as dean of the school in 1964.

Chancellor Sitterson said, "The University accepts Dean Taylor's resignation with regret and with the deepest appreciation for his contribution in one of the University's most demanding administrative responsibilities."

Dr. Taylor is the seventh dean in the 91 year history of the medical school here in Chapel Hill. He succeeded Dr. Reece Berryhill who held the position for 23 years before returning to teaching and research.

He joined the UNC medical faculty as an assistant professor in 1952, became an associate professor in 1958, and a full professor in 1964.

He was one of 25 Markle Scholars in Medical Science in 1954.

A medical officer and Lt. Commander in the U. S. Navy from 1955 until 1957, he served in the Antarctic near the South Pole with Operation Deepfreeze.

Academically, Dr. Taylor was a teacher of medicine when he received his appointment to the school's deanship six years ago. But he also was a planner. At that time lack of space was the school's most pressing problem. Since that time the medical school has seen the funding of some \$50 million in new buildings.

* * *

Harold P. Coston has been named administrative director of North Carolina Memorial Hospital.

The announcement was made by Dr. C. Arden Miller, vice chancellor for Health Sciences at the University of North Carolina.

Coston has been acting director of the hospital here since 1968. He succeeded William L. Ivey who resigned.

"The period of Mr. Coston's stewardship for the hospital has been marked by dramatic expansion of facilities and programs as well as many operational improvements," Dr. Miller said. "We look forward to additional gains under Mr. Coston's continued service."

* * *

One of the nation's leading critics of organized medicine came to Chapel Hill in November for three days of speeches and conferences. Dr. John H. Knowles, general director of Massachusetts General Hospital, came to deliver the fourth Merrimon Lecture on Tuesday. He also was a featured speaker at three open forums held in the various health sciences schools on the campus.

* * *

Dr. Ralph W. Brauer, director of the Wrightsville Marine Biomedical Laboratory and a visiting professor of physiology at the University of North Carolina in Chapel Hill, is spending a month in Russia visiting underwater physiology research installations. Among the installations he visits are the Oceaneologic Institute in Moscow and the Underwater Habitat Experiment Center on the Black Sea. His plans also in-

(Continued on page 470)

WHAT? WHEN? WHERE?

In Continuing Education

December, 1970

Current Events

January 26-29

Head and Neck Anatomy Conference

Sponsor: Division of Medical Sciences and Division of Continuing Education, East Carolina University

Place: East Carolina University, Greenville, North Carolina

Tuition: \$150 (\$75 for students in residency programs)

Open to holders of M.D., D.D.S., or D.M.D. degree

For Information: Division of Continuing Education

East Carolina University

Greenville, N. C. 27834

February 8-13

Second Annual Family Practice Refresher Course. Recommended for preparation of examination to be given by American Board of Family Practice on Feb. 27-28. Reviews for physicians recent advances and applications of current practice methods in internal medicine, surgery, pediatrics, neurology, psychiatry and urology.

Sponsor: Division of Continuing Education, Medical University of South Carolina and the South Carolina Regional Medical Program

Place: Sheraton-Fort Sumter Hotel, Charleston, South Carolina

Registration: \$135 (open from Oct. 1-Dec. 11)

For Information: Dr. Vince Moseley, Director

Division of Continuing Education

Medical University

Charleston, S. C. 29401

February 11

Symposium on Basic Concepts of Viral Disease

Sponsors: Communicable Disease Center, State Board of Health, Merck, Sharp, Dohme, and Memorial Hospital of Wake County

Place: Memorial Hospital of Wake County, Raleigh, North Carolina, 9 a.m. to 4 p.m.

For Information: William A. Robie, M.D.

Director of Medical Education

Memorial Hospital of Wake County

3000 New Bern Avenue

Raleigh, N. C. 27602

February 12-13

Symposium on Acute Surgical Emergencies, Panels, workshops, and seminars

Sponsor: Department of Surgery, Bowman Gray School of Medicine

Place: Bowman Gray School of Medicine, Winston-Salem, North Carolina, 8 a.m.

Registration: \$75 (limited enrollment)

Open to any physicians who deal with acute surgical problems.

For Information: Dr. Paul M. James

Department of Surgery

Bowman Gray School of Medicine

Winston-Salem, N. C.

February 19-20

Institute for Local Boards of Health—Designed to increase ability of local board members to protect and promote public health. Sessions on legal and administrative responsibilities, new developments in state and local government, related community programs, and local problems and future action.

Sponsor: Institute of Government, State Board of Health, and North Carolina Conference of Local Health Directors

Place: Institute of Government, University of North Carolina at Chapel Hill

Open to members of local Boards of Health and local Health Directors

For Information: Institute of Government

Chapel Hill

North Carolina 27514

- February 22-25 Alton D. Brashear Postgraduate Course in Head and Neck Anatomy
Place: Virginia Commonwealth University, Richmond, Virginia
For Information: Miss Erma Blanchard, Secretary
Department of Continuing Medical Education
Virginia Commonwealth University
Richmond, Virginia 23219
- February 25-26 24th Annual Stoneburner Lecture Series
Place: Medical College of Virginia, Richmond, Virginia
For Information: Miss Erma Blanchard, Secretary
Department of Continuing Medical Education
Richmond, Virginia 28219
- March 18 Wilson Memorial Hospital Postgraduate Symposium: Emergencies in Clinical Practice
(Cardiac Emergencies, The Acute Abdomen, Acute Poisonings and Drug Intoxication
and Patient with Multiple Trauma)
Sponsor: Wilson Memorial Hospital, Wilson, N. C.
Place: Wilson Memorial Hospital, Wilson, N. C., 9 a.m. to 5 p.m.
For Information: Dr. R. W. Youngblood
Wilson Clinic
Wilson, N. C.

Regularly Scheduled Programs

- 1st and 4th
Saturdays,
8:00-9:00 a.m. Regional Continuing Education Program for Physicians. Speakers and case presentations
Sponsors: Medical Staff: Marlboro General Hospital (MGH), Bennettsville, South
Carolina; Scotland Memorial Hospital (SMH), Laurinburg, North Carolina; and Chester-
field County Memorial Hospital (CCMH), Cheraw, South Carolina
Place: Jan 23—MGH; Feb. 27—MGH; Mar. 6—CCMH; Mar. 27—MGH
For Information: W. H. Davidson, M.D.
Scotland Memorial Hospital
Laurinburg, North Carolina 68352
- Alternate
Tuesdays,
1:00 p.m. Tumor Board Conference: Presentation of problems by practicing physicians with con-
ference telephone communications with multispecialty panel.
Sponsors: Regional Medical Program, New Hanover Memorial Hospital, Duke University
Medical Center
Place: Margaret Graham Conference Room, New Hanover Memorial Hospital, Wilming-
ton, North Carolina
Dates: Jan. 12 and 26; Feb. 9 and 23; Mar. 9 and 23.
For Information: L. B. Mason, M.D.
New Hanover Memorial Hospital
Wilmington, N. C.

Coming Events

- May 10-14 Advanced Electrocardiography
Place: Grady Memorial Hospital Auditorium, Atlanta, Georgia
For Information: Miss Carole Mintz
American Heart Association
44 East 23 Street
New York, New York 10010
- May 15 Mid-Year Meeting of North Carolina Orthopedic Association
Place: Azalea Room, The Carolina, Pinehurst, N. C. 2 p.m.
For Information: Dr. Bruce Dorman, Secretary
315 North 17 Street
Wilmington, N. C. 28401
- May 15-19 117th Annual Session, Medical Society of the State of North Carolina
Place: The Carolina, Pinehurst, North Carolina
For Information: William N. Hilliard, Executive Director
P. O. Box 790
Raleigh, North Carolina 27602

AUDIOVISUAL LIBRARY

Recently established in the offices of the Medical Society of the State of North Carolina is a new audiovisual library. The first material available through this library is a series of videotapes produced in cooperation with the N. C. Chapter, American College of Surgeons. The topics and physicians featured on the tapes are as follows:

Lower Extremity Amputation
Carcinoma of the Breast

—Dr. George Johnson, UNC
—Dr. Fleming Fuller, Kinston
Dr. George Jordan, Houston
Dr. Simmons Patterson, Durham
Dr. Francis D. Moore, Boston
—Dr. James Newsome, UNC
—Dr. James C. Bruce, Greensboro
—Dr. Craig and Panel, UNC
—Dr. Paul Ebert, Duke

Management of Carcinoma of the Breast
Cardiac Monitoring during Surgery
Physical Signs in Coronary Heart Disease
Management of Crush Injuries of the Chest
Diagnosis and Treatment of Endocrine Disorders Amenable to Surgery
Femoral Artery Occlusion
Gastric Ulcer
Gunshot Wound of the Face
Management of the Acute Head Injury
Use and Abuse of Psychoactive Drugs
Pulmonary Insufficiency Following Trauma and Surgery
Rehabilitation of the Hand
Renal Artery Stenosis
Management of Stroke
Fluids and Electrolytes in Surgery
Surgery of the Liver
Recent Advances in Vascular Surgery
Conservation of Voice
X-Ray Evaluation of the Injured Patient

—Dr. George Jordan, Houston
—Dr. Donald Silver, Duke
—Dr. Richard T. Myers, Bowman Gray
—Dr. Nicholas Georgiade, Duke
—Dr. Guy L. Odom, Duke
—Dr. Lipton and Panel, UNC

—Dr. Francis D. Moore, Boston
—Panel, UNC
—Dr. Glenn Young, Duke
—Panel, UNC
—Panel, UNC
—Dr. Richard Myers, Bowman Gray
—Dr. David C. Sabiston, Duke
—Dr. Newton Fischer and Panel, UNC
—Dr. James Scatliff, UNC

These tapes utilize a one-inch Ampex format and can be played on any one-inch Ampex recorder. Additional information regarding the equipment needed to make use of these programs may be obtained from the Medical Society office or from Mr. Read Clark, Kirkman Electronics, Drawer K-Salem Station, Winston-Salem, N. C. 27108. In addition to physicians, these tapes are available to other health service personnel.

UNC NEWS NOTES

(Continued from page 467)

cluded visits to space physiology installations to discuss problems of weightlessness and related research.

He also plans to extend invitations to selected Russian scientists to attend an international high pressure conference scheduled for January, 1971, at the Wrightsville Marine Biomedical Laboratory.

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Dr. John C. Gower has joined the Department of Biostatistics (UNC School of Public Health). He was associated with the Rothamsted Experimental Station in England where he is senior principal scientific officer. While here he will do research in multivariate analysis.

* * *

Ten members of the Department of Biostatistics (UNC School of Public Health) participated last week in the 98th Annual Meeting of the American Public Health Association in Houston.

Those chairing or discussing in a session: Kenan Professor and chairman of the department, Dr. Bernard G. Greenberg, Associate Professor James R. Abernathy, Assistant Professor Donna R. Brogan, As-

sociate Professor Peter A. Lachenbruch, discussant.

Those presenting papers were Dr. Greenberg, Dr. Lachenbruch, Assistant Professor Michael Symons and Visiting Professor Alastair Scott, Associate Professor Elizabeth J. Coulter, Dr. Coulter, Professor H. B. Wells and Linda Wienir, Assistant Professor Gary G. Koch, and Instructor William Johnson.

* * *

Dr. Kenneth Sugioka has been named chairman of the UNC School of Medicine's new Department of Anesthesiology.

Dr. I. M. Taylor, dean of the School, said that creation of the new department was necessary to help the medical school meet the growing health needs of North Carolina by expanding a vital specialty within the medical school. The medical school is indeed fortunate to have Dr. Sugioka as chairman of one of its most important departments. He is eminently well qualified in both anesthesiology and administration, Dr. Taylor said.

* * *

The Center for Alcohol Studies at the University of North Carolina held an open public meeting Nov. 19 on the topic "Law and Drinking Behavior."

The public meeting followed and summarized two

days of intensive discussion and reports at an invitational scientific meeting.

Five nationally prominent behavioral scientists met with a variety of professionals within the University and from various agencies of the state of North Carolina.

Dr. John Ewing, UNC Department of Psychiatry, is director of the Center for Alcohol Studies.

* * *

Dr. Takey Crist, assistant professor of obstetrics and gynecology, has been elected president-elect of the District IV Junior Fellows of American College of Obstetrics and Gynecology at the district meeting held in Charleston, S. C.

Dr. Crist received both his M.D. and A.B. from the University of North Carolina. Before becoming a member of the Medical School faculty in July of this year, he spent four years as resident at the North Carolina Memorial Hospital in Chapel Hill.

NEWS NOTES FROM THE BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST

Ten persons recently joined the full-time faculty of the medical school. They are Dr. Milton Raben, associate professor of radiology; Dr. Charas Suwanwela, visiting associate professor of neuro-surgery; Dr. Carol Cunningham, assistant professor of biochemistry; Dr. James G. McCormick, research assistant professor of otolaryngology; Dr. Robert L. Michielutte, research assistant professor of sociology; Dr. John D. Tolmie, assistant professor of anesthesiology; Dr. Robert L. Dixon, instructor in medicine; and Miss Harriet Maria Ammann, instructor in biological sciences in the Division of Allied Health Programs.

Physicians appointed to the part-time faculty were Dr. Harvey H. Allen, instructor in clinical surgery; Dr. Jerry L. Bennett, instructor in clinical pediatrics; Dr. Elia C. Dimitri, assistant professor of clinical pediatrics; Dr. James C. Gaither, instructor in clinical medicine; Dr. Arthur S. Lynn Jr., instructor in clinical medicine; Dr. Henry R. Malloy, instructor in clinical surgery; Dr. Roberta A. Savitz, clinical instructor in community medicine; and Dr. Helen L. Tinnin, adjunct associate professor of community medicine.

Dr. Raben, former assistant professor of radiology at the University of Miami School of Medicine and associate director of the Department of Radiotherapy at Mount Sinai Hospital in Miami, will head the radiotherapy unit of the Department of Radiology. A former member of the faculty of Duke University School of Medicine, he holds the B.S. degree from Rensselaer Polytechnic Institute and the M.D. degree from Tufts University School of Medicine. After completing residency training in radiology at Cornell Medical Center, he took a year of fellowship training at Memorial Hospital in New York City.

Dr. Suwanwela is on sabbatical leave from Chulalongkorn University School of Medicine, Bangkok, Thailand, where he is associate professor of surgery and director

of the Section on Neurosurgery. He holds the M.D. degree from the Faculty of Medicine, Chulalongkorn Hospital, University of Medical Sciences, Bangkok. He took residency training at North Carolina Baptist Hospital and two years of fellowship training in neurosurgery at the University of Chicago.

Dr. Clay recently completed three years of work at the National Institutes of Health where he was a special staff fellow of the National Heart Institute and a research associate in the pharmacology training program of the National Institute of General Medical Sciences. He holds the A.B. degree from Dartmouth College and the M.A. and Ph.D. degrees from Boston University.

Dr. Cunningham, who received the B.S. and M.S. degrees from Oklahoma State University and the Ph.D. degree from the University of Illinois, recently completed postdoctoral training in biochemistry at Cornell University, Ithaca, N. Y.

Dr. McCormick returns to the medical school after a year as research scientist with the New Jersey Neuropsychiatric Institute. Earlier he studied as a postdoctoral fellow in sensory physiology at Princeton University served as a research contractor with the Naval Undersea Research and Development Center in Point Mugu, Calif.; and worked as a biologist with the National Institutes of Health in San Juan, Puerto Rico. He holds the B.S. degree from Bucknell University and the M.A. and Ph.D. degrees from Princeton University.

Dr. Michielutte for the past four years has been an assistant professor in the Institute of Social Research, Florida State University. He holds the B.A. degree from Knox College and the M.S. and Ph.D. degrees from Florida State University. He will be based in the Behavioral Sciences Center.

Dr. Tolmie recently completed nine years of military service with the U. S. Navy Medical Corps, during which he served as chief of anesthesia at the U. S. Naval Hospital in Guam and chief of anesthesia at the U. S. Naval Hospital at Camp Lejeune. He received the B.A. degree from Hobart College and the M.D. degree from McGill University School of Medicine. He interned at Royal Victoria Hospital in Montreal, Canada, and completed residency training at the Philadelphia Naval Hospital.

Dr. Dixon will have teaching and research responsibilities in nuclear physics. He holds the B.S. and Ph.D. degrees from the University of South Carolina where he was elected to Phi Beta Kappa. He also served for five years with the U. S. Navy during which time he taught nuclear physics.

Dr. Richards' area of interest is hematology. He received the B.S. degree from Davidson College and the M.D. degree from the Medical College of South Carolina. Following internship at Columbia (S. C.) Hospital, he completed residency training and one year of fellowship training in hematology at North Carolina Baptist Hospital.

Miss Ammann has held faculty positions at Lamar Junior College and Louisburg College. She holds the

B.S. degree from the University of Dayton and the M.S. degree from New Mexico Highlands University. She has completed course work for the Ph.D. degree in zoology at N. C. State University.

* * *

Three members of the faculty participated in the American College of Surgeons Annual Clinical Congress in Chicago. A movie on "Immediate Care of Patients with Spinal Cord Injuries," prepared by Dr. Eben Alexander Jr., professor of neurosurgery, was shown Oct. 13. Dr. Clair E. Cox, associate professor of urology, was moderator of a panel discussion entitled "Antibacterial Therapy of Urinary Tract Infections" and Dr. David L. Kelly, assistant professor of neurosurgery, spoke on "Diagnostic Aids in Cerebellar Tumor" on Oct. 14.

* * *

Dr. William M. McKinney, assistant professor of neurology, and Dr. Ralph W. Barnes, research instructor in neurology, participated in the 15th annual meeting of the American Institute of Ultrasound in Medicine Oct. 12-15 in Cleveland, Ohio. Dr. Barnes presented papers on "Engineering and Acoustical Principles Applied to Echoencephalography," "An Ultrasound Moving Target Indicator System for Diagnostic Use" and "Ultrasound Evaluation of Heart Prosthesis." Dr. McKinney spoke on "The Development of a Clinical Sonic Laboratory," "Pulsatile Echoencephalography" and "A Review of Echoencephalography."

* * *

Faculty members participating in the District IV Annual Conference of the American College of Obstetricians and Gynecologists Oct. 18-21 in Charleston, S. C., were: Dr. Frank Greiss, professor of obstetrics and gynecology; Dr. John P. Gusdon Jr., associate professor of obstetrics and gynecology; and Dr. Francis M. James III, assistant professor of anesthesiology. Dr. Greiss moderated a postgraduate course in obstetric anesthesia and presented papers on "Pudendal and Paracervical Block Anesthesia in Obstetrics" and "The Delivery of Obstetrical Anesthesia." Dr. Gusdon presented a paper on "Immunological Studies on Fetal Allograft." Dr. James presented two papers entitled "The Availability of Anesthesia Personnel for Obstetrics" and "The Treatment of Anesthetic Emergencies."

* * *

Dr. Julius Howell, associate professor of surgery, was a speaker at the annual meeting of the American Society of Plastic and Reconstructive Surgery Oct. 3-9 in Los Angeles, Calif. He spoke on "Medical Legal Problems."

* * *

Dr. George S. Malindzak, associate professor of physiology, presented a paper on "Correlation Techniques in Life Sciences" at the NASA-George C. Marshall Space Center in Huntsville, Ala., Oct. 22.

* * *

Dr. James F. Martin, professor of radiology, was a guest speaker at the meeting of the Kansas Chapter of the American College of Radiology Oct. 11 in Topeka, Kan. The title of his talk was "Correlation of

Radiographic and Gastrocamera Studies in Lesions of the Stomach."

* * *

Participating in a meeting of the Southeastern Chapter of the Society of Nuclear Medicine Oct. 29-31 in Cincinnati, Ohio, were Dr. Douglas Maynard, associate professor of radiology; Dr. Richard L. Witcofski, associate professor of radiology, and Tom Gnau, radiopharmacist. Dr. Maynard presented a paper on "Blood Pool Scanning." Dr. Witcofski read a paper entitled "Regenerating Rat Liver as a Model for the Study of Radiation Dose-Rate Effects," and Gnau gave a paper entitled "The Qualitative and Quantitative Determination of Radio-Chromatograms Using the Gamma Camera."

* * *

Dr. Charles E. McCall, assistant professor of medicine, was visiting lecturer at the National Institute of Allergy and Infectious Diseases Sept. 29-30 in Bethesda, Md. He lectured on "The Embarrassed Neutrophil."

* * *

Dr. R. Winston Roberts, professor of ophthalmology, taught a course on "Early Diagnosis of Glaucoma" during a meeting of the American Academy of Ophthalmology and Otolaryngology, Oct. 4-8, in Las Vegas, Nev.

* * *

Dr. Robert N. Headley, associate professor of medicine, was selected Physician of the Year in Winston-Salem by the Mayor's Committee for Employment of the Handicapped.

* * *

Dr. David R. Mace, professor of family sociology, is the author of a book published recently. "The Christian Response to the Sexual Revolution," was published by Abingdon Press.

NEWS NOTES FROM THE DUKE UNIVERSITY MEDICAL CENTER

Dr. Eugene Stead, Florence McAlister Professor of Medicine and former chairman of the Department of Medicine, has received two recent awards.

In Los Angeles, at the annual meeting of the Association of American Medical Colleges, he received the Abraham Flexner Award for Distinguished Service to Medical Education. Two weeks later in Atlantic City, Dr. Stead received the American Heart Association's 1970 James B. Herrick Award for distinguished achievement in the advancement and practice of clinical cardiology.

* * *

Dr. William G. Anlyan, vice president for health affairs, took over the chairmanship, the highest elective office, of the Association of American Medical Colleges at its Los Angeles meeting.

* * *

Three Duke doctors have been named to ranking positions in the Southern Psychiatric Association.

Dr. Joseph B. Parker Jr., professor of psychiatry, was named president-elect; Dr. Ewald W. Busse, professor and chairman of the Department of Psychiatry,

was named chairman of the Board of Regents; and Dr. William P. Wilson, professor of psychiatry, was re-elected secretary-treasurer.

* * *

Another professor of psychiatry, Dr. Carl Eisdorfer, was named president-elect of the Gerontological Society at the organization's annual meeting in Toronto. Dr. Eisdorfer also has been chosen chairman of a 35-member task force on aging for the American Psychological Association.

* * *

Dr. David W. Schomberg, assistant professor of obstetrics and gynecology, presented a paper on "Regulation of Mammalian Reproduction" at a National Institutes of Health invitational conference in Bethesda, Md.

* * *

Dr. Robert G. Brame, formerly assistant professor at the Bowman Gray School of Medicine, has joined the staff of the Department of Obstetrics and Gynecology as an associate professor.

* * *

Recent promotions include the following nine to associate professorships: Drs. Everett H. Ellinwood, Charles R. Keith, Charles W. Neville and William W. K. Zung, all in psychiatry; Dr. Arthur C. Chandler, ophthalmology; Dr. William G. Bradford, pathology; Dr. Robert E. Fellows Jr., physiology; and Dr. Jack D. Davidson, nuclear medicine.

NEWS NOTES FROM THE NORTH CAROLINA REGIONAL MEDICAL PROGRAM

Walter C. Bornmeier, M.D., President of the American Medical Association, was keynote speaker at the Third Annual Duke Conference on Physician's Assistants, held at the Durham Hotel and Civic Center November 12 and 13.

The Conference, which explored the legal, administrative, and educational aspects of the program, attracted more than 400 physicians, health administrators, educators, and others interested in this emerging occupation and its potential for relieving the manpower shortage.

The North Carolina Regional Medical Program supports the Duke Physician's Assistants project with a grant of \$183,320 for the current fiscal year.

Project director is D. Robert Howard, M.D., who chaired the conference in which workshops featured personnel connected with the P. A. Program, physician's assistants, and physicians who have used them.

A general practitioner, J. Elliot Dixon, M.D., Ayden, testified that he can treat 76% more patients by using his assistant for routine procedures. In addition, each patient gets more time, quality of care is better, there is less waiting, and the doctor is more relaxed, according to Dr. Dixon.

Other guest speakers were Marc J. Musser, M.D., medical director of the Veterans Administration; Vernon E. Wilson, new director of the Health Services and Mental Health Administration; Eugene A. Stead, M.D., former chairman of the Department of Medicine at Duke and founder of its Physician's Assistants

Program; E. Harvey Estes, Jr., M.D., chairman, Duke's Department of Health Sciences; and Terry Sanford, president, Duke University.

* * *

Directors of Continuing Education at three schools of medicine meet monthly with Ron Davis, Ed.D., Division Director for N. C. RMP, to coordinate efforts in continuing education among North Carolina health institutions. Emery Miller, M.D., Bowman Gray; William DeMaria, M.D., Duke; and Glenn Pickard, M.D., UNC, join Davis and William Byrd, director of Continuing Education, School of Allied Health and Social Professions, East Carolina University, in the strategy sessions.

* * *

N. C. RMP advisory committees have been reviewing proposals for new projects in their areas of concern. Committee recommendations are an important factor in the revision and approval or disapproval of such proposals.

Physicians who chair the consulting bodies, composed of experts in the specified disease areas, are D. E. Ward, Jr., M.D., Lumberton, Cancer Committee; John McLeod, M.D., Asheville, Heart Disease Committee; and Donald L. Wallace, M.D., Moore Memorial Hospital, Pinehurst, Stroke Committee.

Selection of the chairman of the Continuing Education Committee was scheduled for that committee's December meeting.

* * *

The relatively new Division of Professional Services of the North Carolina Regional Medical Program will consolidate technical and professional staff services. Division members currently include representatives in nursing, physical therapy, and medical records, who are available as consultants to lay and professional groups. They also advise on project review and development.

Audrey J. Booth, R. N., Durham, is division director. Miss Booth came to N. C. RMP in 1968 as nursing coordinator. She also holds an assistant professorship at the School of Nursing, UNC, Chapel Hill.

NORTH CAROLINA HEART ASSOCIATION

The North Carolina Heart Association has set a deadline of February 1, 1971 for receiving applications for research grants-in-aid up to \$2,500, except in unusual circumstances when they will consider applications for larger amounts from Investigators within the State working in the cardiovascular field. These grants-in-aid are awarded by the Heart Association and its Chapters to scientists to serve as pilot projects and as a method of encouraging postdoctoral scientists toward a research career. Preference in funding will be given to Junior Investigators.

Applications for these grants may be forwarded to Richard G. Lester, M.D., Chairman, Research Committee, North Carolina Heart Association, P. O. Box 2408, Chapel Hill, North Carolina 27514.

This research program is separate from that of the American Heart Association, which annually makes numerous research grants to scientists in North

Carolina. Those interested in inquiring about the national program are asked to write to the American Heart Association, 44 East 23rd Street, New York, New York 10010.

* * *

Dr. Eugene A. Stead, Jr., of Durham has received the American Heart Association's 1970 James B. Herrick Award for distinguished achievement in the advancement and practice of clinical cardiology.

Dr. Stead, professor of medicine at Duke University School of Medicine since 1947 and a past-president of the North Carolina Heart Association, received the award on November 13 in Atlantic City. It was presented by the AHA Council on Clinical Cardiology at a dinner in conjunction with the American Heart Association's Annual Meeting and Scientific Sessions. The award consists of a medallion and a citation.

The Council on Clinical Cardiology gives the award annually to honor the late Dr. James B. Herrick, pioneer Chicago cardiologist who initially defined coronary thrombosis (a blood clot that blocks an artery which supplies the heart).

NATIONAL INSTITUTE OF MENTAL HEALTH

Appointment of Dr. Morris E. Chafetz as acting director of the newly established Division of Alcohol Abuse and Alcoholism of the National Institute of Mental Health, Health Services and Mental Health Administration, has been announced by Dr. Bertram S. Brown, institute director.

Dr. Chafetz is presently director of Clinical Psychiatric Services of Massachusetts General Hospital, and associate clinical professor of psychiatry, Harvard Medical School.

The Division incorporates and absorbs the NIMH National Center for Prevention and Control of Alcoholism, which was established at the Institute in 1966.

* * *

The first major attempt to highlight the most important references to the research literature on adaptation and coping behavior in human development, has been issued by the National Institute of Mental Health, Health Services and Mental Health Administration.

The compact volume "Coping and Adaptation—A Behavioral Sciences Bibliography," is designed to be of aid to research scientists, clinical practitioners, and community mental health workers seeking a guide to information relevant to their work in the areas of psychotherapy and counselling, rehabilitation, and crisis intervention.

Emphasis is given to recent research covering readily-available articles and monographs published through 1967. Books, unpublished technical reports and foreign journals are not represented.

The abstracts are in alphabetical order according to the name of the senior author. There is a comprehensive subject index.

Copies are available at \$1.75 each from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. It is Public Health Service Publication No. 2087.

Classified Advertisements

Position Available—Emergency Room physician. Maximum starting salary \$30,000; plus liberal benefits. Established 4-man emergency department. Contact: Medical Director, Columbia Hospital, Columbia, South Carolina 29204. Phone: (803) 252-6301, ext. 318.

WANTED—OBSTETRICIAN-GYNECOLOGIST for thirteen man partnership in Eastern North Carolina—looking for man to develop and direct this area of medicine within group with idea of adding OBGYN associate one year later. Staff consists of 2 surgeons, 2 internists, 2 family medicine, 1 pediatrician, 1 ophthalmologist, and 5 general practitioners. Modern clinic building with good out-patient laboratory and X-ray facilities adjacent to modern 125 bed accredited county hospital. Good partnership earnings with incentive plan for higher paying specialties. Paid vacation, sick leave, post-graduate study, auto expenses, dues, disability insurance, good retirement benefits. Starting salary \$1,800.00 per month for 6 months—full partnership in two years. Pleasant working conditions in a very harmonious group. Small town with rapid industrial growth. Variety of recreational opportunity available. Write R. M. Thomas, Mgr., Tarboro Clinic, P. O. Box 40, Tarboro, North Carolina.

WANTED—Physician urgently needed for administration and teaching in Physician's Assistant Program at Bowman Gray School of Medicine. Reply to Leland Powers, M.D., Bowman Gray School of Medicine, Winston-Salem, N. C. 27103

Westinghouse 100 K. V. X-Ray Unit for sale. Complete. Call or write President's Office, Meredith College, Raleigh, N. C.

A physician member of the N. C. RMP Advisory Council was scheduled to speak at the "1971 Legislative Health Preview" sponsored by the North Carolina Health Council for its 21st annual meeting Tuesday, Dec. 1, at the Durham Hotel.

Edgar T. Beddingfield, Jr., M.D., Wilson, Immediate Past-President of the Medical Society of North Carolina and chairman of the Society's Committee on Legislation, was slated to appear on a panel on health agency legislative programs.


Also participating in the program was John Fowler, M.D., Durham, chairman of the Study Commission on North Carolina's Emotionally Disturbed Children.

Jacob Koomen, M.D., Raleigh, director of the State Board of Health, was Program Committee chairman.

Some 400 North Carolinians concerned about health were expected to attend the all-day session.

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TOTAL DELIVERIES AND PERINATAL DEATHS BY COLOR FOR COUNTIES AND SELECTED CITIES
OF RESIDENCE, WITH RATES PER 1,000 DELIVERIES¹: NORTH CAROLINA,
SEPTEMBER 1970 AND MOST RECENT 12-MONTH TOTALS

COUNTY	WHITE					NONWHITE					COUNTY	WHITE					NONWHITE							
	Perinatal Deaths		Total Deliveries Oct. 1969 - Sept. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths	Total Deliveries Oct. 1969 - Sept. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths	Total Deliveries Oct. 1969 - Sept. 1970	Perinatal Rate Per 1,000 Deliveries		Perinatal Deaths		Total Deliveries Oct. 1969 - Sept. 1970	Perinatal Rate Per 1,000 Deliveries	Perinatal Deaths	Total Deliveries Oct. 1969 - Sept. 1970	Perinatal Rate Per 1,000 Deliveries						
	September 1970	October 1969 - September 1970										September 1970	October 1969 - September 1970											
NORTH CAROLINA	180	2025	69586	29.7	118	1352	28889	46.8																
ALAMANCE	2	31	1298	23.9		20	433	46.2	PENDER		4	135	--		4	153	--							
ALEXANDER	2	17	350	48.6		1	37	--	PERQUIMANS			78	--	1	5	58	--							
ALLEGHANY	1	4	137	--			5	--	PERSON		7	293	23.8		12	199	60.3							
ANSON	1	4	164	--	4	28	289	96.9	PITT	5	27	772	35.0	4	41	676	60.7							
ASHE		9	317	28.4			3	--	POLK		4	109	--		4	41	--							
AVERY		7	185	37.8			2	--	RANDOLPH	4	38	1287	29.5	2	4	140	--							
BEAUFORT	4	12	420	28.6	1	10	241	41.5	RICHMOND	3	26	525	49.5	3	19	300	62.3							
BERTIE		5	111	45.0		12	242	48.6	ROBERTS	2	28	641	43.7	5	53	1580	33.5							
BLADEN		5	257	19.5	1	12	216	55.6	ROCKINGHAM	2	28	992	28.2	2	24	395	60.8							
BRUNSWICK		8	301	26.6	1	4	153	--	ROWAN	2	32	1210	26.4	1	12	317	37.9							
BUNCOMBE	6	60	2147	27.9	1	18	280	64.3	RUTHERFORD	2	19	682	27.9		5	152	32.8							
BURKE	4	31	935	33.2		4	82	--	SAMPSON	2	9	444	20.3		16	315	50.8							
CABARRUS	2	29	1067	27.8	2	12	319	37.6	SCOTLAND	2	14	329	42.6	3	14	287	48.8							
CALDWELL	35	1144	30.6		4	100	--		STANLY	1	16	589	27.2		4	129	--							
CAMDEN		2	51	--		1	35	--	STOKES	1	10	372	26.9			51	--							
CARTERET	1	17	475	35.8		3	88	--	SURRY	1	29	919	31.6		3	68	--							
CASWELL		3	149	--	1	8	183	43.7	SWAIN	1	4	89	--		1	69	--							
CATAWBA	6	56	1557	36.0	2	8	245	32.7	TRANSYLVANIA	1	14	302	46.4		1	24	--							
CHATHAM	1	6	345	17.4		10	179	55.9	TYRRELL		1	31	--		1	32	--							
CHEROKEE	1	11	296	37.2		2	16	--	UNION	3	22	748	29.4	2	14	323	45.3							
CHOWAN		1	109	--		2	106	--	VANCE		3	278	--	2	14	356	38.3							
CLAY		5	75	--			1	--	WAKE	7	62	3144	19.7	2	42	1126	37.3							
CLEVELAND	2	31	1009	30.7		26	452	67.5	WARREN		4	60	--	1	11	164	67.1							
COLUMBUS	3	20	529	37.8		23	331	69.5	WASHINGTON		1	150	--	2	6	135	44.4							
Craven	5	37	1191	31.7	1	11	380	28.9	WATAUGA	4	17	399	42.6			3	--							
CUMBERLAND	7	113	3881	29.1	7	65	1465	44.4	WAYNE	1	36	1182	30.5	5	36	610	59.0							
CURRITUCK		1	60	--		1	28	--	WILKES	2	30	866	34.6		2	56	--							
DARE	1	3	107	--			5	--	WILSON		20	578	34.6		19	565	33.6							
DAVIDSON	3	42	1534	27.4	2	17	265	64.2	YADKIN	1	8	360	22.2		4	35	--							
DAVIE		7	285	24.6		5	64	--	YANCEY		6	193	27.1			1	--							
DUPLIN		10	410	24.4	1	13	297	43.8	CITIES City totals are also included in county totals															
DURHAM	4	42	1544	27.2	4	53	994	53.3	ALBEMARLE		1	129	--		1	47	--							
EDGEcombe	2	10	428	23.4	4	25	584	42.8	ASHEVILLE	2	15	675	22.2	1	16	241	66.4							
FORSYTH	10	81	2801	28.9	8	59	1176	50.2	BURLINGTON	1	12	532	22.6		11	132	85.3							
FRANKLIN	1	7	199	35.2		14	238	58.8	CHAPEL HILL		7	329	21.3		3	74	--							
GASTON	11	80	2602	30.7	2	24	500	48.0	CHARLOTTE	9	82	3219	25.5	7	78	2093	37.3							
GATES		2	54	--		7	85	--	CONCORD		7	223	31.4		4	124	--							
GRAHAM		2	118	--		14	--	--	DURHAM	2	29	941	30.8	4	49	864	56.7							
GRANVILLE		6	260	23.7	2	18	332	54.2	EDEN		7	236	29.7		1	66	--							
GREENE	1	5	110	45.5	1	8	135	59.3	ELIZABETH CITY		2	151	--		1	106	--							
GUILFORD	4	91	3830	23.8	7	86	1640	50.4	FAYETTEVILLE	2	37	952	28.9	2	34	611	55.6							
HALIFAX	1	12	403	29.8	2	32	608	52.6	GASTONIA	4	27	813	33.2	2	11	226	48.7							
HARNETT		17	565	30.1	2	16	351	45.6	GOLDSBORO		19	368	51.6	3	14	262	53.4							
MAYWOOD	3	29	631	46.0			12	--	GREENSBORO	2	48	1876	25.6	5	59	967	61.0							
HENDERSON	3	20	626	31.9		2	49	--	GREENVILLE	1	10	325	30.8	3	16	184	87.0							
HERTFORD		8	133	60.2	1	15	269	55.8	HENDERSON		1	121	--		7	139	50.4							
HOKE		4	123	--		4	260	--	HICKORY	2	20	361	55.4		4	115	--							
HYDE		3	42	--		2	50	--	HIGH POINT	1	14	821	17.1	1	20	469	42.6							
IREDELL	2	28	1048	26.7	3	18	363	49.6	JACKSONVILLE		11	438	25.1		2	72	--							
JACKSON	1	10	285	35.1		1	60	--	KINSTON		9	277	32.5		9	231	39.0							
JOHNSTON	6	32	765	41.8		18	328	54.9	LENOIR		6	231	26.0		2	49	--							
JONES		2	83	--		5	78	--	LEXINGTON		9	268	33.6	1	5	98	--							
LEE		10	419	23.9	2	4	169	--	LUMBERTON	1	7	200	35.0	2	10	212	47.2							
LENOIR	2	21	587	35.9	2	20	429	48.6	MONROE		3	137	--		5	95	--							
LINCOLN	1	16	528	30.3	1	7	96	--	NEW BERN		6	160	37.5	1	5	124	40.3							
MCDOWELL		20	526	38.0	1	5	45	--	RALEIGH	3	29	1651	17.6	1	27	584	46.2							
MACON		3	236	--			4	--	REIDSVILLE	1	3	160	--		1	4	93	--						
MAJISON		13	232	58.0			2	--	ROANOKE RAPIDS		7	179	39.1		2	30	--							
MARTIN	1	5	207	24.2	1	10	253	39.5	ROCKY MOUNT E		2	117	--	1	10	159	54.5							
MECKLENBURG	13	125	4969	25.2	8	95	2404	39.5	ROCKY MOUNT N		5	254	18.9	1	4	98	--							
MITCHELL	2	7	186	37.6			1	--	SALISBURY	1	9	226	39.8	1	6	146	41.1							
MONTGOMERY	1	9	245	36.7		11	127	86.6	SANFORD		4	172	--	1	2	77	--							
MOORE	1	27	483	55.9		11	244	45.1	SHELBY	1	8	187	42.8		6	134	44.8							
NASH		14	613	22.8	1	28	531	52.7	STATESVILLE	1	6	236	25.4	3	11	157	70.1							
NEW HANOVER	4	36	1286	28.0	3	19	368	51.6	THOMASVILLE		1	4	208	--	1	7	95	--						
NORTHAMPTON		1	102	--	1	11	280	39.3	WILMINGTON	2	15	658	22.9	3	16	322	49.7							
ONSLow	7	55	2416	22.8		19	453	41.9	WILSON		9	307	29.3	6	256	23.4								
ORANGE		25	857	29.2	3	11	228	45.2	WINSTON SALEM	5	45	1439	31.3	7	54	1119	48.3							
PAMLICO		2	101	--		2	59	--																
PASQUOTANK		4	290	--		1	168	--																

¹Perinatal Death Rate = $\frac{\text{fetal deaths (stillbirths of 20 weeks gestation or more) + neonatal deaths (under 28 days of life)}}{\text{total live births + stillbirths of 20 weeks gestation or more}} \times 1000$

Rates are not calculated for less than 100 deliveries or less than 5 perinatal deaths.

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BR—Book Review

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MEDICAL SOCIETY OF THE STATE
OF NORTH CAROLINA

TRANSACTIONS

ONE HUNDRED SIXTEENTH ANNUAL SESSION

held at

Pinehurst, North Carolina

May 16-20, 1970

Briefed and Abridged by

William N. Hilliard, Executive Director

Medical Society of the State of North Carolina

203 Capital Club Building, Raleigh, North Carolina 27602



MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA TRANSACTIONS

ONE HUNDRED SIXTEENTH ANNUAL SESSION
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Pinehurst, North Carolina
May 16-20, 1970

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OFFICERS—1969-1970

President: EDGAR T. BEDDINGFIELD, JR., M.D., Wilson Clinic, Wilson 27893
President-Elect: LOUIS DES. SHAFFNER, M.D., 300 S. Hawthorne Rd., Winston-Salem 27103
First Vice-President: ROBERT P. CROUCH, M.D., 520 Biltmore Ave., Asheville 28801
Second Vice President: ROSE PULLY, M.D., 1007½ N. College St., Kinston 28501
Secretary: CHARLES W. STYRON, M.D., 615 St. Mary's St., Raleigh 27605
Speaker: JAMES E. DAVIS, M.D., 1200 Broad St., Durham 27705
Vice-Speaker: CHALMERS R. CARR, M.D., 1822 Brunswick Ave., Charlotte 28207
Past President: DAVID G. WELTON, M.D., 1012 Kings Drive, Charlotte 28207
Executive Director: WILLIAM N. HILLIARD, 203 Capital Club Bldg., Raleigh 27602
Executive Vice President: JAMES T. BARNES, 203 Capital Club Bldg., Raleigh 27602

COUNCILORS—1967-1970

First District: WILLIAM H. ROMM, M.D., Box 26, Moyock 27958
Vice Councilor: EDWARD G. BOND, M.D., Chowan Medical Center, Edenton 27932
Second District: ERNEST W. LARKIN, JR., M.D., 211 N. Market St., Washington 27889
Vice Councilor: J. BENJAMIN WARREN, M.D., Box 1465, New Bern 28560
Third District: FRANK R. REYNOLDS, M.D., 1613 Dock St., Wilmington 28401
Vice Councilor: JOHN T. DEES, M.D., Box 815, Burgaw 28425
Fourth District: HARRY H. WEATHERS, M.D., Central Medical Clinic, Roanoke Rapids 27870
Vice Councilor: ROBERT H. SHACKLEFORD, M.D., 115 W. Main St., Mount Olive 28365
Fifth District: HARRY H. SUMMERLIN, SR., M.D., 203 Atkinson St., Laurinburg 28352
Vice Councilor: CHARLES A. S. PHILLIPS, M.D., Pinehurst Surgical Clinic, Pinehurst 28374
Sixth District: THOMAS C. WORTH, M.D., Rex Hospital, Raleigh 27603
Vice Councilor: JOHN W. WATSON, M.D., 104 New College St., Oxford 27565
Seventh District: CHARLES L. STUCKEY, M.D., 1515 Elizabeth Ave., Charlotte 28204
Vice Councilor: JESSE CALDWELL, JR., M.D., 114 W. Third Ave., Gastonia 28052
Eighth District: RICHARD A. KELLY, M.D., 1116 Grove Street, Greensboro 27403
Vice Councilor: THORNTON R. CLEEK, M.D., 379 S. Cox Ave., Asheboro 27203
Ninth District: PAUL MCN. DEATON, M.D., 766 Hartness Rd., Statesville 28677
Vice Councilor: THOMAS E. FITZ, M.D., 11 13th Avenue, N.E., Hickory 28601
Tenth District: GEORGE G. GILBERT, M.D., One Doctors Park, Asheville 28801
Vice Councilor: ERNEST H. STINES, M.D., Midway Medical Center, Canton 28716

SECTION CHAIRMEN—1969-1970

General Practice of Medicine: JOHN P. HARLOE, M.D., 1850 E. 3rd St., Charlotte 28204
Internal Medicine: WILLIAM B. HERRING, M.D., 1200 N. Elm St., Greensboro 27405
Ophthalmology & Otolaryngology: GEORGE M. COOPER, JR., M.D., 201 Bryan Bldg., Raleigh 27605
Surgery: MARSHALL G. MORRIS, M.D., 1309 N. Elm St., Greensboro 27401
Pediatrics: ROBERT E. BALSLEY, M.D., Box 817, Reidsville 27320
Obstetrics-Gynecology: LUTHER TALBERT, M.D., N. C. Memorial Hospital, Chapel Hill 27514
Public Health & Education: MILLARD B. BETHEL, M.D., Box 949, Raleigh 27602
Neurology & Psychiatry: ROBERT L. ROLLINS, JR., M.D., Dorothea Dix Hosp., Raleigh 27602
Radiology: ERNEST B. SPANGLER, M.D., 3811 Henderson Road, Greensboro 27410
Pathology: CHARLES F. CARROLL, JR., M.D., Cabarrus Mem. Hosp., Concord 28025
Anesthesiology: THOMAS H. IRVING, M.D., 705 Glen Echo Trail, Winston-Salem 27106
Orthopaedics & Traumatology: JAMES S. MITCHENER, JR., M.D., Box 1599, Laurinburg 28352
Dermatology: GEORGE W. JAMES, M.D., 205 S. Hawthorne Rd., Winston-Salem 27103
Student AMA Chapters (SAMA): MR. T. REED UNDERHILL, 112 Maxwell Rd., Chapel Hill 27514

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

DONALD B. KOONCE, M.D., 1601 Medical Center Drive, Wilmington 28401—
2 year term (January 1, 1969 to December 31, 1970)

FRANK W. JONES, M.D., Rt. 3, Westlake Hills, Newton 28658—2 year term
(January 1, 1969 to December 31, 1970)

DAVID G. WELTON, M.D., 1012 Kings Drive, Charlotte 28207—2 year term
(January 1, 1970 to December 31, 1971)

AMOS N. JOHNSON, M.D., P. O. Box 158, Garland 28441—2 year term
(January 1, 1970 to December 31, 1971)

ALTERNATES TO THE AMERICAN MEDICAL ASSOCIATION

JAMES E. DAVIS, M.D., 1200 Broad St., Durham 27705—2 year term
(January 1, 1969 to December 31, 1970)

D. E. WARD, JR., M.D., 2604 N. Elm St., Lumberton 28358—2 year term
(January 1, 1969 to December 31, 1970)

JOHN GLASSON, M.D., 306 S. Gregson St., Durham 27701—2 year term
(January 1, 1970 to December 31, 1971)

EDGAR T. BEDDINGFIELD, JR., M.D., Wilson Clinic, Wilson 27893—2 year
term (January 1, 1970 to December 31, 1971)

STAFF OF HEADQUARTERS OFFICE

Executive Vice President—MR JAMES T. BARNES, Raleigh

Executive Director—MR. WILLIAM N. HILLIARD, Raleigh

Administrative Assistant—MR. BRYANT D. PARIS, JR., Raleigh

Controller—MR. GARLAND R. PACE, Raleigh

Office Manager—MRS. LARUE A. KING, Raleigh

Field Representative—MR. DAN I. MAINER, Raleigh

Membership Secretary—MRS. DEANNA M. GODWIN, Raleigh

Advertising Secretary—MISS KATHERINE LANGDON, Raleigh

Headquarters Secretary—MISS JOY ATKINSON, Raleigh

Public Relations Secretary—MRS. JANIE P. BROWN, Raleigh

Physician Placement Secretary—MISS BARBARA VAUGHAN, Raleigh

1970 Compilation of Annual Reports

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REPORT OF CONSTITUTIONAL SECRETARY

The membership on December 31, 1969, was 3422, which includes 289 life members. There were 170 new members during the year, and 56 deceased physicians for the year.

The resumes of the Executive Council meetings are recorded in the Transactions. The Compilation of Annual Reports illustrates the extensive activity of the membership in committee work during the year. Numerous changes have occurred in committee structure and organization and in purpose and projects.

The many hours of work and the energy ably spent by the various commissioners, committee chairman, committee members, councilors, and officers is commendable. The demands of time and effort of the councilors, executive committees and particularly the Presidnet increases yearly.

The excellent work and great interest of the Auxiliary in an extraordinary active year will be seen by a review of Auxiliary President's report in the Compilation.

Private and government insurance programs and the third party in medical affairs has resulted in extensive work by the appropriate committees. Numerous negotiations, consultations, and decisions have been made with legislative members and legislative bodies, summaries of which are in the annual reports.

Ground breaking ceremonies were held on , 1969, with the President presiding. Mrs. Robert Scott, wife of the Governor of North Carolina, was the honoree, and aided the President in ground breaking ceremonies.

During the summer of 1969 the Rothrock, Rothrock, and Reynolds Report was received and studied by the Executive Council. Virtually the entire report was approved by the Council. During the fall of 1969 implementation of the suggested changes was carried out. The Executive Director was elevated to the office of Executive Vice President, the assistant Executive Director was made Executive Director, and significant changes were made in the office operation. The changes in the headquarters office should result in improved efficiency. The council has employed Rothrock, Rothrock, and Reynolds to continue consultation with the Society at four monthly intervals in the hope that maximum efficiency will be maintained.

The Society is fiscally sound and the headquarters office has continued to render outstanding service to the membership of the Society.

Charles W. Styron, M.D., Secretary

REPORT OF THE EXECUTIVE DIRECTOR

This will be a report of activities as Assistant Executive Director during the early portion of the reporting period and as Executive Director for the latter months of the Society year.

The Executive Council, on September 28, 1969, approved October 1, 1969 as the date for beginning implementation of the recommendations of the Study of The Organization of the Headquarters

Office. It was on this date that the transition of duties of Executive Director-Treasurer of the State Medical Society was effected.

The financial affairs of the society at this time were in good order as attested to by the auditing firm of A. T. Allen & Company, certainly a credit to the fiscal management of Mr. James T. Barnes.

Every effort has been exerted to see that the activities of your Executive Director were expended in the direction that would be most beneficial to the best interest of the Medical Society and the physicians of North Carolina. Once a policy or course of action has been chartered by the officers or Council, then that has been most assuredly the aim toward which personal efforts have been expended.

Your President, Dr. Edgar T. Beddingfield, Jr., has graciously given valuable guidance to the efforts of the Executive Director and the staff in overall direction so that activities might be properly coordinated with all objectives of the Society. Wholehearted appreciation is expressed for his valuable assistance for he should be credited with whatever success has been achieved.

During the September 24-27, 1969 Annual Committee Conclave held at Mid Pines Club in Southern Pines, as Assistant Executive Director, staffing functions were carried out for the Professional Service Commission along with general responsibility and assistance for arrangements of the meetings scheduled for all commissions.

Work with many different committees of the Society on various activities and projects has undergone an increasing involvement for the period of this report. Staffing of the quarterly meetings of the Insurance Industry Committee has experienced an expanding work load resulting from the principle function of the committee's Claim Review Service and its increase in number of claims reviewed.

Most annual projects and activities of the Society have continued such as the Annual Conference of County Medical Society Officers and Committeemen conducted on Friday evening and Saturday, January 30-31, 1970; A two-day Speech Training Session, for Society leaders, held in Winston-Salem November 5-6, 1969; publication of the Public Relations Bulletin on a schedule of nine issues a year; An educational exhibit at the North Carolina State Fair, October 17-25, 1969; Support of the State High School Science Fair program; The presentation of First Aid Competition trophies to the N.C. Association of Rescue Squads; An Orientation Information Kit for new members; A County Medical Society "Secretary Check List for 1970"; Presentation of gift subscriptions of the AMA Magazine TODAY'S HEALTH to the Governor, Council of State, members of the General Assembly, Supreme and Superior Court Judges, each College Library; and many other

The President's district visitation program involved staff attendance as part of the effort to improve communication opportunities for individual officers of the various County Medical Societies and through them to the entire membership.

A number of State and national meetings were

attended on behalf of the Society with a resulting reservoir of information which should be of value to the operation of the Society's affairs.

The activity year might be classified as one of change for the Society, as one observes at close range the effects of what is occurring in the House of Medicine. Communication with the membership has never been more important but grows in complexity as increasing demands are made on the time of the individual members. Increased and in some areas intensified activities have characterized this year for the Medical Society. Such involvement will undoubtedly magnify in the future.

Appreciative recognition should be expressed to all members of the Headquarters Staff for their cooperative and dedicated attitude toward the reassignments effected under the reorganization as directed by the Executive Council. Each staff member has exemplified an outstanding effort for the tasks assigned and each has contributed to the team approach of the work of the Headquarters office.

The Field Representative, Mr. Dan Mainer, The Controller, Mr. Garland Pace, The Office Manager, Mrs. LaRue King, and the Administrative Assistant MR. Bryant Paris, have all willingly assumed additional responsibilities thereby permitting the work of the administrative staff to function smoothly.

On April 15, 1970 the membership stood at which indicated a continuation of interest and loyalty to the organization by the profession throughout the state.

Filed with this report is the original 1969 Annual Audit Report of A. T. Allen & Company, Certified Public Accountants of Raleigh, N. C. for the fiscal period January 1, 1969 to December 31, 1969 submitted under date of, 1970. The Audit represents a report of the activities of the Treasurer for the year 1969 and is recommended to you for approval.

William N. Hilliard, Executive Director-Treasurer

(See Auditor's Report beginning
on Page 7)

REPORT OF ADMINISTRATIVE ASSISTANT

The past year started with the usual flourish of activity as the North Carolina General Assembly convened in January. Your Administrative Assistant participated in the review of 320 health and medical related bills -- 14% of the 2,347 bills introduced during the 1969 General Assembly. Each day during the session bills that were introduced the previous day were screened for detection of possible health or medical involvement.

Contact was made with many physicians to solicit their aid and assistance in order to obtain support for the Society's position on various measures. Without your active participation much of the Society's effort would have been to no avail. I was present at two major meetings out of the State this past year. The Annual Meeting of the American Medical Association held in New York and the Annual United States Chamber of Commerce Public Affairs Conference

held in Washington were attended.

Other than the Annual Meeting, the Officers' Conference and the Committee Conclave, I have attended numerous other committee meetings. The past year I have had the responsibility of staffing fourteen various committees. Many of these committees have met at times other than during the Conclave.

In the past it has been my responsibility to prepare the MEDPAC Bulletin and the Legislative Bulletin on occasion. In October at the time of the implementation of the Rothrock, Reynolds and Reynolds recommendations regarding the Headquarters Staff, I was assigned the responsibility of the Public Relations Bulletin.

Again this past year I have devoted spare time to the activities of MEDPAC. I look forward to being able to contribute more to the activities of this organization.

Bryant D. Paris, Jr.
Administrative Assistant

REPORT OF FIELD REPRESENTATIVE

Your field representative has been involved in a wide variety of administrative duties, at the discretion of your President and Executive Director, during the year. Approximately one-third of the component county societies were called upon during the year. Some of these calls required additional follow-up visits. A trend has developed here for as I have become more knowledgeable, resulting from a year and a half service capability, the real active component societies have come to use this capability more. This results in fewer quantity calls but improves the quality of each call.

I assisted your president in arranging, planning and implementing ten (10) presidential visitation meetings with the ten (10) Medical Society districts. Certain planning and administrative duties for this year's Officers' Conference were delegated to me by your executive director and accomplished. In addition to taking over the responsibility for your physician placement service in October of this year, I was assigned an additional eight (8) state society committees for staffing purposes.

I have purposely made this report brief and general. I have not mentioned every project that the field service was involved with during the year for they are as many and varied as the number of committees in the State Society. For example, when I call upon a county medical society president, his State Medical Society service needs may vary anywhere from nothing to an enumeration of all ongoing State Medical Society activities.

Specific tasks are assigned to me by your Executive Director, which may be a small segment of a particular project or may be the entire project--more often it is a segment of a project. Therefore, if I were to mention all of the projects I was involved with during the year, it would merely be repetitious for you. I look upon this position as being a member of a team, contributing by team work to the over-all

AUDITOR'S REPORT

Medical Society of the State of North Carolina, Incorporated
Raleigh, North Carolina
12 Months Ended December 31, 1969

OFFICERS

Dr. Edgar T. Beddingfield, Jr., President Wilson, N.C.
Dr. Louis deS. Shaffner, President-Elect Winston-Salem, N.C.
Dr. Robert P. Crouch, First Vice-President Asheville, N.C.
Dr. Rose Pully, Second Vice-President Kinston, N.C.
Dr. Charles W. Styron, Secretary Raleigh, N.C.
Dr. James E. Davis, Speaker of the House Durham, N.C.
Dr. Chalmers R. Carr, Vice-Speaker of the House Charlotte
Dr. David G. Welton, Past President Charlotte, N.C.
Mr. James T. Barnes, Executive Vice-President Raleigh, N.C.
Mr. William N. Hilliard, Executive Director Raleigh, N.C.

Chairman and Members of the Finance Committee
Medical Society of the State of North Carolina, Inc.
Raleigh, North Carolina

Gentlemen:

Pursuant to engagement, we have audited the books and records of the Medical Society of the State of North Carolina, Inc., Raleigh, North Carolina, for the period beginning January 1, 1969, and ending December 31, 1969, and present herewith our report.

Exhibits and Schedules

In presenting our findings, as the result of the audit, we have prepared four Exhibits and five Schedules, as outlined in the Index, which are attached hereto as a part of this report.

Balance Sheet—Exhibit "A":

The first statement is a list of the Assets, Liabilities, Reserves and Fund Balances, which we designate as Balance Sheet, December 31, 1969, Exhibit "A". This statement has been divided into two sections. One contains the Current Operating Fund, which represents the Current Assets, Liabilities and Reserves. The other has been designated as a Capital or Non-Operating Fund containing the office equipment, real estate and capital stock owned and used by the Medical Society - at estimated values established in a prior year plus actual cost for purchases during the last several years.

The Cash on Hand and in Bank is made up of \$300.00 Petty Cash Funds and \$236,644.91 in a checking account at First Citizens Bank & Trust Company, Raleigh, North Carolina. There was \$4,413.26 on savings deposit with the same bank. Also, we include, under available cash, the loan receivable from General Motors Acceptance

Corporation of \$250,000.00, which will mature March 9, 1970. The Cash in Bank was verified through a reconciliation of the balances as shown by the records of the Medical Society with a certificate obtained independently from the bank. This reconciliation is shown in detail in Schedule - 1 of this report.

Accounts Receivable - Regular in the amount of \$2,644.16 are shown on the Balance Sheet. The balance represents the total of several uncollected balances due for local advertising in the State Medical Journal.

Accounts Receivable - National Advertising in the amount of \$4,937.85 represent November and December, 1969, National Advertising in the State Medical Journal.

Air Travel Deposit of \$425.00 is cash deposited with Eastern Airlines for air travel credit cards.

The real estate, capital stock and office equipment and furniture shown on the Balance Sheet in the amount of \$257,331.46 is listed in detail in Schedule - 2. This represents an estimate made in a prior year which has been adjusted for purchases made during the last sixteen years. The items shown represent cost value of the equipment to the Medical Society as no depreciation has been recorded. As there were no liabilities outstanding against the equipment, we have shown the entire amount as Fund Balances - Capital Fund - in the Balance Sheet. Schedule - 5 reveals \$49,364.01 has been spent on the Construction In Progress - New Headquarters Facility Building.

Under the "Liabilities" section we have listed those accounts, expenses, etc., incurred prior to December 31, 1969, for which statements or accounts were rendered or payment was due.

The Accounts Payable - Trade, in the amount of \$23,614.45 represents unpaid accounts at December 31, 1969. Most of these items were paid during the course of the audit.

The \$2,343.00, Dues to be Refunded, represents State dues collected which are refundable to the members. The \$48,650.00, "Due American Medical Association", is 1970 A.M.A. dues collected in 1969. The \$535.00, "American Medical Association Dues in Excrow", represents dues paid to the State Society but which cannot be remitted to the National Society at the time due to diverse disqualifying reasons. At December 31, 1969, the Society had collected from members \$5,270.00 for MEDPAC contributions and \$23,744.00 for county dues. These items will be remitted to the respective organization in regular course. The payroll taxes, \$514.45, for Social Security and \$2,621.68 for employees' withholding, were paid during the course of the audit. There is a Mortgage Payable on Person Street property, in Raleigh, to G.M. Greenfield for \$13,000.00, due each August 28 for five years.

The deferred credits of \$150,098.00 are for payments of \$1,990.00 received on technical exhibits space for the 1970 Convention, and \$148,108.00 on 1970 membership dues. These remittances were received in 1969 and will be transferred to the income accounts in 1970.

The Reserve accounts set forth on Exhibit "A" are for specific purposes or specific projects, which normally last for periods longer than one year; therefore, special provisions are made to set aside funds for these specified Reserves.

The Fund Balance section of the Balance Sheet is comprised of two figures, \$207,691.69 being the balance of the Current Operating Fund for the year, and \$343,476.06 representing the balance of Capital Fund.

Statement of Fund Balances - Exhibit "B":

The second statement is an analysis of the changes in Fund Balances during the year and is detailed on Exhibit "B".

Statement of Income and Expenses - Exhibit "C":

A statement showing a budget comparison of the income and expenses for the twelve-months period is given in Exhibit "C". This statement is, in effect, a statement of operations for the year, and by examination it will be seen that the Income of \$603,569.84 exceeds the Expenses of \$354,105.46 by \$249,464.38. There was included in the expenses \$467.25 in Capital Expenditures for Equipment. Eliminating these we show a margin from operations of \$249,931.63.

Comparing with the Budget we see that actual income was more than anticipated by \$218,554.84. The main items accounting for this were the interest income and rental income, which are not budgeted and the large increase in annual dues.

Further comparisons reveal that the total actual expenses were \$30,206.54 less than the budget provision.

Cash Receipts and Disbursements—Exhibit "D":

A statement showing in detail the cash receipts and disbursements of the Society during the year under review is shown in Exhibit "D" which we summarize as follows:

Cash Balance January 1, 1969	\$ 200,745.70
Cash Receipts During the Year	1,083,341.02
Total Cash Available	\$1,284,086.72

Less:

Disbursements During the Year:

For Operations	\$353,159.22
For AMA and Others-Dues	371,036.00
For furniture and fixtures	467.25
For Construction in Progress-	
New Facilities	44,707.69
For Land - 222 North Person	
Street	23,358.39
	\$792,728.55

Cash Balance December 31, 1969	*\$ 491,358.17
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*For cash purposes we have included the GMAC Loan Receivable of \$250,000.00, maturity date 3-9-70, as Available Cash.

We made a careful analysis of the cash transactions and, where practicable, traced the receipts to their original source. Disbursements for expenses were supported by cancelled checks and invoices issued in the regular course of business. We believe the funds have all been accounted for.

GENERAL COMMENTS

A surety bond covering faithful performance of Mr. William N. Hilliard, Executive Director, in the amount of \$50,000.00, is in force, held by the Medical Society and was examined by us. We also examined and found in force a Primary Commercial Blanket Honesty Bond in the amount of \$50,000.00; a fire insurance policy - with 80% co-insurance clause - covering fire loss on office equipment, books and records in the office of the Executive Director, Raleigh, North Carolina, in the amount of \$20,000.00; an Automobile Schedule Policy; a standard Workmen's Compensation and Employer's Liability Policy; a Comprehensive General Liability Policy, and an Accident Policy on Officers, Delegates and Staff.

We were extended every courtesy and cooperation during the course of the audit and we experienced no trouble in obtaining the necessary information for this report.

SCOPE OF EXAMINATION AND OPINION

We have examined the balance sheet of the Medical Society of the State of North Carolina, Incorporated, as of December 31, 1969, and the related statements of income and expense and fund balances for the year then ended. Our examination was made in accordance with generally accepted

auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of income and expense and fund balances present fairly the financial position of the Medical Society of the State of North Carolina, Incorporated, at December 31, 1969, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles for non-profit organizations applied on a basis consistent with that of the preceding year.

Very truly yours,
A. T. ALLEN & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

(SEAL)
Raleigh, N. C.
January 20, 1970

Medical Society of the State of North Carolina,
Incorporated
Raleigh, North Carolina

INDEX

EXHIBITS

Balance Sheet	Exhibit "A"
Statement of Fund Balances	Exhibit "B"
Statement of Income and Expenses	Exhibit "C"
Cash Receipts and Disbursements	Exhibit "D"

SCHEDULES

Cash On Hand And In Banks	Schedule—1
Schedule of Capital Assets	Schedule—2
Schedule of Land Costs - Durham-Raleigh Highway	Schedule—3
Schedule of Building Site Costs - Person and Lane Streets, Raleigh	Schedule—4
Schedule of Construction In Progress - New Headquarters Facility Building	Schedule—5

EXHIBIT "A"—BALANCE SHEET

December 31, 1969

ASSETS:

CURRENT OPERATING FUND:

Cash on Hand and in Banks—(Schedule—1)	\$491,358.17
Accounts Receivable - Regular	2,644.16
Accounts Receivable - National Advertising	4,937.85
Air Travel Deposit	425.00

TOTAL CURRENT OPERATING FUND \$499,365.18

CAPITAL OR NON-OPERATING FUND - (Schedule—2)

Real Estate - Land-Durham-Raleigh Highway	\$ 26,604.55
Real Estate - Land-Lane and Persons Streets, Raleigh	227,733.90
Office Furniture and Fixtures	39,573.60
Construction in Progress - New Headquarters Facility	49,364.01
Capital Stock, Common - State Medical Journal Advertising Bureau	200.00

TOTAL CAPITAL OR NON-OPERATING FUND 343,476.06

TOTAL ASSETS \$842,841.24

LIABILITIES, RESERVES AND NET WORTH:

LIABILITIES:

Accounts Payable - Trade	\$ 23,614.45
Dues to be Refunded	2,343.00
Due American Medical Association	48,650.00
Due American Medical Association - Dues in Escrow	535.00
Due County Medical Association	23,744.00
Due MEDPAC	5,270.00
Federal and State Income Tax Withheld	2,621.68
Payroll Taxes Payable	514.45
Mortgage Payable - 222 N. Person St. - G. M. Greenfield	13,000.00
TOTAL LIABILITIES	\$120,292.58

DEFERRED CREDITS:

Advance Payments on Technical Exhibit Space at 1970 Convention	\$ 1,990.00
Advance Payment on 1970 State Membership Dues	148,108.00

TOTAL DEFERRED CREDITS 150,098.00

(Continued on next page.)

(EXHIBIT "A" CONTINUED FROM PREVIOUS PAGE)

RESERVES:

Reserve for Deferred Compensation	\$ 250.00	
Reserve for Mental Hygiene Committee	5,000.00	
Reserve for Traffic Liability Safety Program	135.28	
Reserve for Medical Building Site Committee	2,122.60	
Reserve for Mental Health State Conference Programs	3,580.68	
Reserve for Mental Health Contactorama Programs	3,739.92	
Reserve for Medical Society History Allocation	5,176.53	
Reserve for Committee on Anesthesia Study	530.50	
Reserve for Section on O & O	<u>747.40</u>	
TOTAL RESERVES		21,282.91

FUND BALANCES:

Current Operating Fund-(Exhibit "B")	\$207,691.69	
Capital Fund - (Exhibit "B")	<u>343,476.06</u>	
TOTAL FUND BALANCES		551,167.75

TOTAL LIABILITIES, RESERVES, AND NET WORTH		<u>\$842,841.24</u>
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EXHIBIT "B"

STATEMENT OF FUND BALANCES

December 31, 1969

CURRENT OPERATING FUND:

Balance - January 1, 1969	\$ 43,949.71	
ADD: Net Profit From Operations	<u>249,931.63</u>	
TOTAL		\$ 293,881.34
LESS: Transfers to Capital:		

Furniture and Fixtures	\$ 467.25	
Land - 222 North Person Street	36,358.39	
Construction in Progress -		
New Headquarters Facility	<u>49,364.01</u>	<u>86,189.65</u>

TOTAL CURRENT OPERATING FUND - TO EXHIBIT "A"		\$207,691.69
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CAPITAL FUND:

Balance - January 1, 1969	\$ 257,331.46	
ADD: Transfers Made From Current Fund	<u>86,189.65</u>	
TOTAL		\$ 343,521.11
LESS: Items Traded on New Assets		<u>45.05</u>

TOTAL CAPITAL FUND - TO EXHIBIT "A"		<u>\$343,476.06</u>
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TOTAL FUND BALANCES - DECEMBER 31, 1969		<u>\$551,167.75</u>
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EXHIBIT "C"

STATEMENT OF INCOME AND EXPENSES

12 Months Ended December 31, 1969

INCOME:	Budget Provisions	Actual	Difference Over Or (Under)
Membership Dues - Current and Prior Years	\$313,500.00	\$514,913.50	\$201,413.50
Sales of Journals, Rosters and Value Scales	3,000.00	4,259.14	1,259.14
Author Contributions to Cuts	200.00	112.10	(87.90)
Revenue Unexpected	900.00	562.85	(337.15)
Sales of Technical Exhibit Space	16,000.00	14,930.00	(1,070.00)
Journal Advertising - Local	9,000.00	12,349.64	3,349.64
Journal Advertising - National	40,000.00	33,140.68	(6,859.32)
Commission (1%) from AMA for Dues Collected	2,165.00	2,207.80	42.80
Commission (1%) from MEDPAC for Dues Collected	250.00	247.60	(2.40)
Rental Income		486.44	486.44
Interest Income from Savings Account		20,360.09	20,360.09
TOTAL INCOME	\$385,015.00	\$603,569.84	\$218,554.84
EXPENSES:			
Executive Budget:			
A-1 Expense - President	\$ 6,000.00	\$ 6,969.67	\$ 969.67
A-2 President's Secretarial Assistance	5,000.00	1,350.00	(3,650.00)
A-3 Travel - Secretary	1,000.00	768.91	(231.09)
A-4 Salary - Executive Director	22,000.00	22,250.00	250.00
A-5 Travel - Executive Director	5,000.00	5,000.00	-0-
A-6 Clerical Assistants - Office	36,331.00	28,185.41	(8,145.59)
A-7 Equipment - Office	1,500.00	467.25	(1,032.75)
A-8 Expenses - Office	16,500.00	15,706.57	(793.43)
A-9 Bonding	914.00	915.00	1.00
A-10 Auditing	1,150.00	1,597.55	447.55
A-11 Payroll Taxes	4,000.00	3,648.36	(351.64)
A-12 Insurance	600.00	2,192.00	1,592.00
A-13 Membership Record System	6,865.00	7,483.56	618.56
A-14 Publications, Reports and Executive Aids	200.00	227.75	27.75
A-15 Insurable: Interest Insurance and Retirement Plan	5,295.00	5,295.30	.30
A-16 Salary - Assistant Executive Director	16,500.00	16,875.00	375.00
A-17 Salary - Assistant and Education Consultant	7,042.00	5,956.15	(1,085.85)
A-18 Travel - Assistant Executive Director	3,000.00	2,561.69	(438.31)
A-19 Travel - Assistant and Education Consultant	2,500.00	709.95	(1,790.05)
A-20 Assistant to Executive Director	8,000.00	8,000.00	-0-
A-21 Travel - Assistant to Executive Director	2,000.00	832.39	(1,167.61)
A-22 Executive Accountant, Salary of	11,000.00	11,000.00	-0-
A-23 Field Representative, Salary of	13,195.00	13,195.00	-0-
A-24 Field Representative, Travel of	5,000.00	3,502.35	(1,497.65)
Total Executive Budget	\$180,592.00	\$164,689.86	\$ (15,902.14)
Journal Budget:			
B-1 Publication of Journal	\$ 43,000.00	\$ 42,770.55	\$ (229.45)
B-2 Cuts for Journal	800.00	590.29	(209.71)
B-3 Salary - Editor	2,500.00	2,500.00	-0-
B-4 Salary - Assistant Editor	5,618.00	5,618.00	-0-
B-5 Expenses - Editorial Office	450.00	678.27	228.27
B-6 Expenses - Business Manager's Office	750.00	489.13	(260.87)
B-7 Equipment - Business Manager's Office	100.00	-0-	(100.00)
B-8 Travel for Journal	200.00	240.50	40.50
B-9 Payroll Taxes	950.00	673.00	(277.00)
B-10 Sales Tax on Journal and Roster Sales	1,300.00	1,187.23	(112.77)
B-11 Publication of Roster	6,500.00	6,858.00	358.00
B-12 Expense - Executive Council Reports	10,000.00	6,310.80	(3,689.20)
B-13 Salary - Advertising Secretary	4,960.00	4,966.60	6.60
B-14 Relative Value Studies	-0-	500.00	500.00
Total Journal Budget	\$ 77,128.00	\$ 73,382.37	\$ (3,745.63)

EXHIBIT "C" CONTINUED:

	Budget Provisions	Actual	Difference Over Or (Under)
Intra-Functional Activity Budget:			
C-1 Expenses - Executive Council	\$ 6,000.00	\$ 6,215.59	\$ 215.59
C-3 Expenses - Legislative Committees	6,500.00	5,302.38	(1,197.62)
C-4 Expenses - Maternal Health Committee	4,000.00	4,000.00	-0-
C-6 Expenses - Arrangements Committee	100.00	15.11	(84.89)
C-7 Expenses - Scientific Exhibits Committee	675.00	567.24	(107.76)
C-8 Expenses - Mental Health Committee	650.00	359.13	(290.87)
C-9 Expenses - Mediation Committee	200.00	10.71	(189.29)
C-10 Expenses - Chronic Illness Committee	2,000.00	204.60	(1,795.40)
C-11 Expenses - Committees in General	3,000.00	2,966.41	(33.59)
C-13 Expenses - Occupational Health Committee	200.00	6.29	(193.71)
C-14 Expenses - Professional Insurance Committee	175.00	49.53	(125.47)
C-16 Expenses - Negotiations Committee	200.00	-0-	(200.00)
C-17 Expenses - Student AMA Committee	1,800.00	1,388.15	(411.85)
C-18 Expenses - Disaster Medical Care Committee	400.00	298.05	(101.95)
C-19 Expenses - Industrial Commission Committee	250.00	11.91	(238.09)
C-21 Expenses - Medical Legal Committee	100.00	495.76	395.76
C-21 Expenses - Advisory to N.C. Dept. of Motor Vehicles	400.00	84.84	(315.16)
C-24 Expenses - Anesthesia Study Committee	400.00	400.00	-0-
C-26 Expenses - Blue Shield Committee	500.00	17.33	(482.67)
C-27 Expenses - School Health Committee	400.00	20.85	(379.15)
C-28 Expenses - N. C. Board of Public Welfare Advisory Committee	100.00	11.78	(88.22)
C-30 Expenses - Insurance Industry Liaison Committee	500.00	22.36	(477.64)
C-31 Expenses - Rural Health Function	800.00	560.39	(239.61)
C-35 Expenses - Headquarters Facility Committee	500.00	54.58	(445.42)
C-36 Expenses - Family and Marriage Counseling Committee	500.00	-0-	(500.00)
C-37 Expenses - Medicine and Religion Committee	150.00	138.73	(11.27)
C-38 Expenses - AMERF Committee	100.00	22.56	(77.44)
C-39 Expenses - AD Hoc Committee on Task Force XIX	100.00	3.10	(96.90)
C-40 Expenses - Scientific Awards Committee	100.00	-0-	(100.00)
C-41 Expenses - Physical and Vocational Rehabilitation	175.00	-0-	(175.00)
C-42 Expenses - Eye Care and Eye Bank	110.00	8.16	(101.84)
C-44 Expenses - Blue Ribbon Committee - No. 1	100.00	146.00	46.00
C-45 Expenses - Blue Ribbon Committee - No. 2 (Long Range)	100.00	65.72	(34.28)
C-46 Expenses - Committee on Finance	300.00	-0-	(300.00)
C-47 Expenses - Utilization Committee	100.00	-0-	(100.00)
Total Intra-Functional Activity Budget	\$ 31,685.00	\$ 23,447.26	\$ (8,237.74)
Extra-Functional Activity Budget:			
D-1 Expenses - Delegates to AMA	\$ 6,675.00	\$ 5,195.82	\$ (1,479.18)
D-2 Conference Dues	200.00	152.50	(47.50)
D-3 Woman's Auxiliary	4,000.00	3,764.23	(235.77)
D-4 Medical History Allocation	3,600.00	3,600.00	-0-
Total Extra - Functional Activities Budget	\$ 14,475.00	\$ 12,712.55	\$ (1,762.45)
Public Relations Budget:			
E-3 Committee Chairman, Out of State Travel	\$ 500.00	\$ -0-	\$ (500.00)
E-5 Equipment	1,250.00	-0-	(1,250.00)
E-6 Expenses - Office	6,000.00	5,964.88	(35.12)
E-8 Publications and Executive Aids	100.00	93.21	(6.79)
E-9 Audio-Visual Depiction	1,600.00	1,486.72	(113.28)
E-10 Educational Distributions	800.00	285.74	(514.26)
E-11 News and Press Releases	400.00	207.37	(192.63)
E-12 Public Relations Bulletin	3,500.00	3,101.21	(398.79)
E-13 State High School Science FAIR Program	200.00	338.45	138.45

FORWARDED:

Public Relations Budget Continued:	Budget Provisions	Actual	Difference Over Or (Under)
E-14 Exhibits and Displays	650.00	793.37	143.37
E-15 Annual Officers Conference	1,000.00	863.10	(136.90)
E-17 Public and Personified Activities	600.00	606.00	6.00
E-18 Collateral Public Relations	500.00	189.84	(310.16)
Total Public Relations Budget	\$ 17,100.00	\$ 13,929.89	\$ (3,170.11)

Annual Sessions (115th) Convention Budget:

F-1 Programs	\$ 1,800.00	\$ 1,789.92	\$ ((10.08)
F-2 Hotel and Auditorium Expense	4,000.00	3,647.65	(352.35)
F-3 Expenses - Publicity Promotion	500.00	525.11	25.11
F-4 Entertainment	900.00	573.50	(326.50)
F-5 Orchestra and Floor Entertainment	2,500.00	2,970.52	470.52
F-6 Guest Speakers	1,000.00	719.90	(280.10)
F-7 Banquet Speaker	750.00	-0-	(750.00)
F-8 Electric Amplification	125.00	-0-	(125.00)
F-9 Booth Installation and Supplies	5,000.00	4,556.19	(443.81)
F-10 Projection Expense	1,000.00	1,083.74	83.74
F-11 Badges	200.00	239.90	39.90
F-12 Transactions Reporting Service	2,200.00	2,666.63	466.63
F-13 Rental - Extra Facilities	177.00	166.02	(10.98)
F-14 Exhibitors Entertainment	700.00	700.90	.90
F-15 Banquet Expense	500.00	352.01	(147.99)
F-16 Police Security	240.00	330.00	90.00
Total Annual Sessions (115th) Convention Budget	\$ 21,592.00	\$ 20,321.99	\$ (1,270.01)

Miscellaneous Budget:

G-1 Legal Counsel	\$ 9,000.00	\$ 9,316.03	\$ 316.03
G-2 Reporting (Executive Council, etc.)	2,500.00	3,227.59	727.59
G-3 Fifty Year Club	250.00	202.92	(47.08)
G-4 Contingency and Emergency	12,500.00	14,467.30	1,967.30
G-5 Employee Retirement System	9,700.00	9,311.89	(388.11)
G-6 Advalorem Taxes	1,915.00	2,492.06	577.06
G-7 Association of Professions	200.00	200.00	-0-
G-9 Association of American Medical Colleges	225.00	283.41	58.41
G-10 Expense of Commissioners	1,200.00	870.84	(329.16)
G-11 Expenses of Executive Committee	500.00	57.82	(442.18)
G-12 Expenses of Officers to National Meetings	3,000.00	4,084.01	1,084.01
G-13 Travel and Maintenance, Expense of Essential Staff - Out-of-State Sessions	750.00	1,107.67	357.67
Total Miscellaneous Budget	\$ 41,740.00	\$ 45,621.54	\$ 3,881.54
TOTAL EXPENSES	\$384,312.00	\$354,105.46	\$ (30,206.54)

SUMMARY:

TOTAL INCOME		\$603,569.84
LESS: EXPENSES:		
Executive Budget	\$164,689.86	
Journal Budget	73,382.37	
Intra-Functional Activity Budget	23,447.26	
Extra Functional Activities Budget	12,712.55	
Public Relations Budget	13,929.89	
Annual Sessions (115th) Convention Budget	20,321.99	
Miscellaneous Budget	45,621.54	354,105.46
EXCESS OF INCOME OVER EXPENSES		\$249,464.38
ADD: Capital Expenditures from Current Funds		467.25
NET MARGIN FROM OPERATIONS		\$249,931.63

EXHIBIT "D"

RECEIPTS

CASH RECEIVED FROM REGULAR OPERATIONS:

Members' Dues - Current and Prior Years	\$587,266.50
Medical Journal Advertising - Local	14,231.31
Medical Journal Advertising - National	32,683.35
Sale of Exhibit Space - 1969 Convention	13,160.00
Sale of Exhibit Space - 1970 Convention	1,990.00
Medical Journal Subscriptions and Sales of Rosters and Value Scales	4,148.67
Authors Contributions to Cost of Cuts	182.01
Commissions (1%) for Collecting Dues	2,409.28
Unexpected Revenue	656.03
Reimbursement for Items Paid by The Society	2,710.52
Miscellaneous Refunds	4,031.32
Rental Income	486.44

TOTAL CASH RECEIVED FROM REGULAR OPERATIONS. . . . \$ 663,955.43

AMERICAN MEDICAL ASSOCIATION - REGULAR DUES COLLECTED	256,480.00
COUNTY DUES COLLECTED	114,275.50
AMERICAN MEDICAL ASSOCIATION - DUES PLACED IN ESCROW	280.00
MENTAL HEALTH SPECIAL RESERVE	1,500.00
INTEREST EARNED ON SAVINGS ACCOUNT	20,360.09
MEDICAL EDUCATION POLITICAL ACTION COMMITTEE.	26,490.00
TOTAL RECEIPTS	\$1,083,341.02
CASH BALANCES - JANUARY 1, 1969:	
First Citizens Bank & Trust Company, Raleigh, N.C.	
Cash on Hand	200,745.70
TOTAL TO ACCOUNT FOR	\$1,284,086.72

DISBURSEMENTS

DISBURSEMENTS FOR CURRENT OPERATIONS:

Expenditures - Executive Budget	\$162,819.37	
Less: Capital Expenditures - Office Equipment	467.25	\$ 162,352.12
Expenditures - Journal Budget		70,631.83
Expenditures - Intra-Functional Activity Budget		22,309.33
Expenditures - Extra-Functional Activity Budget		9,730.15
Expenditures - Public Relations Budget		12,640.61
Expenditures - Annual Sessions (115th Convention Budget.		21,375.00
Expenditures - Miscellaneous Budget		45,659.27
Refunds of Dues Over Collected		105.00
Refunds of AMA Dues in Excrow		435.00
Refunds - Miscellaneous		3,925.57
Accrued Payroll Taxes - 12-31-68		2,863.71
Paid from Reserve Accounts		1,190.07
Prepaid Supplies		1,204.35
Items Paid by The Society - Billed to Others		1,705.25
Total		\$ 356,127.26
Less: Deductions from Wages - Unpaid at 12-31-69:		
Payroll Taxes and Hospitalization Insurance		2,968.04

TOTAL DISBURSEMENTS - CURRENT OPERATIONS. \$ 353,159.22

FORWARDED:

EXHIBIT "D" CONTINUED FROM PREVIOUS PAGE

PAYMENTS TO MEDICAL EDUCATION POLITICAL ACTION COMMITTEE	24,760.00
PAYMENTS TO AMERICAN MEDICAL ASSOCIATION - REGULAR DUES COLLECTED	239,610.00
PAYMENTS TO COUNTY MEDICAL ASSOCIATIONS - REGULAR DUES COLLECTED	106,666.00
EXPENDITURES FOR CAPITAL ASSETS:	
Furniture and Fixtures	467.25
Construction in Progress	44,707.69
Land - 222 North Person Street	<u>23,358.39</u>
TOTAL DISBURSEMENTS	\$ 792,728.55
CASH BALANCES - DECEMBER 31, 1969:	
Cash on Hand and Savings Accounts	<u>491,358.17</u>
TOTAL ACCOUNTED FOR	<u><u>\$1,284,086.72</u></u>

SCHEDULE-1

CASH ON HAND AND IN BANK (Including Savings)

December 31, 1969

FIRST CITIZENS BANK & TRUST COMPANY, RALEIGH, N. C.:

Checking Account - Per Books - Recorded	\$236,644.91
Savings Account - No. 0861010544	4,413.26

GENERAL MOTORS ACCEPTANCE CORPORATION -

Loan No. 12-09587	250,000.00
(Maturity Date 3-9-70 - Rate 7-5/8% - Discounted from 9-10-69)	

PETTY CASH FUND - OFFICE	50.00
TRAVEL ADVANCE FUND - FIELD REPRESENTATIVE	<u>250.00</u>
TOTAL CASH	<u><u>\$491,358.17</u></u>

SCHEDULE—2

SCHEDULE OF CAPITAL ASSETS

December 31, 1969

OFFICE FURNITURE AND FIXTURES:
EXECUTIVE OFFICE:

Wooden File Case - Letter Size	\$ 21.66
Typewriter Desk	25.00
Steel Office Safe	150.00
Steel File Case - Letter Size	20.00
Four Steel Card Files	20.00
Office Chair	35.20
One Desk	62.55
Steel Filing Cabinet	24.50
Office Desk	47.95
Letter File - Two Drawer	29.46
Steel Filing Cabinet	71.75
Office Chairs	40.00
Office Desk	87.29
Office Equipment - Miscellaneous	1,149.39
One Telephone Table - Wooden	15.45
Two Pairs 12" x 38" C. S. Vents and Brackets	8.77
One Desk Lamp	10.26
Two Master Model Audiographs and Attachments	725.67
One Map of Greater Carolinas	37.50
Two Double Files 3" x 5"	11.86
Three Pendafilex Frames (Installed)	5.57
Two Gray Steel Cabinets	103.00
Three Transfer Files	11.89
One Spec. B. Outfit File	7.25
Two Legal Filing Cabinets	19.90
One Filing Shelf	2.50
Plywood Carrying Case for Audiograph	17.00
Map Framed	3.61
Charter Framed	2.57
Cash Box	2.79
Steel Desk	158.98
Three Desk Trays With Stackers	8.57
Waste Basket	1.40
Large Chair Mat	9.27
Glass Desk Top	11.68
Stenograph and Tripod	100.70
Four Drawer Steel Filing Cabinet	78.03
Four Pendafilex Steel Frames (Installed)	7.42
Postal Scale	6.50
Numbering Machine	14.88
Filing Stool	11.23
Bookcase	63.86
Remington Rand Electric Adding Machine	215.01
Mental Storage Cabinet	78.28
Metal Filing Cabinet	92.76
Two Cabinet Shelves (Installed)	10.30
Metal Cash Box	2.32
Pro Rata Share of Cost of Mineograph Machine	337.47
Typewriter Table	21.00
Metal Correspondence Separator	6.18
Metal File and Sections	68.55
Two Typewriters - Large Type (Bulletin)	321.23
Kardex File and Parts	1,842.36
Catalogue Case	20.00
Metal File and Frames	93.07
Secretarial Foot Control	25.75
Three Transfer Files	16.23
Junior Pendafilex File	22.87
Book Case Section	26.25
Swivel Chair and Arm Chair	74.48
Audiograph Converter	28.84
Pendafilex File	5.88
Wood Desk and Two Files	281.43
De Jur Camera With Flash Attachment and Case	100.44
Audiograph Machine - Used	300.00
Flight Bag	38.31
Three Box Files	9.42
Portable Lectern	29.93
Metal File	114.33
Checkwriter - Paymaster	101.48
Desk and Chair	268.45
Supply Cabinet Shelves	25.35
Pro Rata Share of Cost of Imperial Safe ED "60" (Kardex)	290.00
Air Conditioning Equipment - Office	1,621.00
Five-Drawer Letter File and Frames	122.78
Five Transfer Files	20.35

Two Five-Drawer Filing Cabinets	245.56
American Medical Dictionary	25.00
Two Plate Glass Tops for Desks	20.34
Desk, Swivel Chair and Desk Set	253.87
Pro Rata Share of Cost - Vartityper - Used	50.00
Pro Rata Share of Cost - A.B. Dick Offset Duplicator	1,602.27
Ten Pronto Files	46.87
Two Four-Drawer Dutable File Cabinets	61.70
One Kardex File Safe and Base	593.28
Pro Rata Portion of Postage Mailing Machine	427.85
Pro Rata Portion of Robotypewriter	360.50
Pro Rata Portion of Perforator	121.03
Pro Rata Portion of One Table	18.47
Pro Rata Portion of Postal Scale	12.48
Stenorette Machine No. 215391	156.06
Stenorette Machine No. 219890	156.06
Two Transcribing Kits For Stenorettes	60.08
Telephone Adapter and Switch Box	17.66
Two Gray Legal Desk Trays	14.63
Book Case Section No. 813 Walnut	29.26
Gray Table No. 1808	49.59
Three Transcribing Kits for Stenorettes	89.75
Four Stetho Clips for Stenorettes	12.00
Documentor Electric Typewriter	372.55
Remington Electric Typewriter No. E-2289256	360.21
Pro Rata Portion of Used Addressograph Machine No. 312185 With Work Table	75.00
Pro Rata Portion of Hand Truck	3.60
Pro Rata Portion of Two Ginger Valets - No. 7-6-U	26.59
Pro Rata Portion of Remington Electric Typewriter No. 2129420	153.83
Three Letter Size File Cabinets	103.72
One - TU-24 Stak Tube Roll File	40.00
Pro Rata Portion of One No. 11919 Paper Cutter	10.70
One - 15 Ft. x 16 Ft. Rug and Mat	144.82
Pro Rata Portion of Five Tables	27.78
One - 122H Steel Cart With 3 Shelves	35.76
One Brief Case	53.51
Six Four-Drawer Letter Size Files	199.31
One Documentor Electric Typewriter	372.55
One Modern Tub Chair	31.82
Two Book Cases	66.64
One Electric Projection Pointer	77.15
Two Side Arm Chairs, Walnut, Maroon Upholstery	77.62
Two Side Chairs, Walnut, Maroon Upholstery	55.62
One Desk and Chair	44.81
One Conference Table - Walnut	149.81
One Executive Swivel Chair, Walnut, Maroon Upholstery	104.37
One Endura Telephone Timer	13.11
One Walnut Credenza	125.30
Carpet	63.95
Two Glass Desk tops	22.45
One Book Case (Used)	15.45
Pro Rata Portion of One Toledo Postage Scale (Used)	77.25
One 3-Section Book Case	137.61
Pro Rata Portion of One Divisumma 24 Calculator	100.00
Mirror - Secretary's Office	1.01
Portable Electric Baseboard Heater	17.82
Lamp For Conference Room	15.43
Drapes and Rods for Conference Room	114.75
Walnut Dictionary Stand	67.07
Costumer	12.98
Four Side Chairs	73.05
Stenorette Portable Dictating Machine and Case No. 35077	228.11
Pro Rata Portion of One Premier Ream Cutter	130.00
Pro Rata Portion of One Flex-O-Build Desk End File	38.15
Pro Rata Portion of No. 1900 Addressograph	200.00
No. 502 Sort-A-Tray	9.95
Pro Rata Portion of Walnut Step Table	9.25
Pro Rata Portion of White Table Lamp	4.10
Pro Rata Portion of Black Settee	31.08
Pro Rata Portion of Postal Scale Rate Chart	16.13

FORWARDED:

SCHEDULE 2 CONTINUED

Carrying Case for Adding Machine	18.49	Metal Secretary Desk	136.40
Electric Fan	19.45	Secretary Chair	30.20
No. 412 File Unit	15.72	Storage Cabinet	37.00
Pro Rata Portion of Verifax Copier	159.38	Two Chair Mats	12.90
6-Tier file	8.72	Ringe Top Card File	1.60
Pro Rata Portion of 4-Drawer		Stapler	4.95
Letter File	130.91	Punch	3.15
Pro Rata Portion of No. 7795 Virco Desk	16.43	Metal Letter File With Lock	61.60
Pro Rata Portion of No. 4841 Thomas		Storage Cabinet	37.00
Collator	93.00	Royal Typewriter	133.31
File Cabinet, 4-Drawer No. 24A	41.95	Two Electric Fans	63.29
Remington Typewriter No. 3064244	388.90	Four-Drawer Metal File	69.49
Remington Typewriter No. 3521299	388.90	Two-Drawer Metal File With Lock	
One Hand Truck	13.59	and Base	18.36
Steel Shelving	123.60	Supply Cabinet	75.00
Walnut Pamphlet Rack	7.00	Two Desk Trays and Stacks	4.64
Plastic Letter Tray	2.17	Metal Storage Cabinet	57.29
Two Combination Desk Top Files	19.26	Pro Rata Share of Cost of	
Stenograph Machine No. 645223 (Used)	100.00	Memoograph Machine	508.53
One No. 5F Cosco Stenographic Chair	30.85	Pendaflex Frames (Installed)	4.64
One No. 1260 Desk - Plastic Top	177.52	Folder Machine and A.B. Dick Stand	397.88
One Steno Chair	30.85	Used Elliott Addressograph	123.83
One Scriptor 13" Elite Electric		Two Telephone List Finders	6.06
Typewriter	311.85	Pendaflex Frame (Installed)	4.50
Remington Rand Cabinet Kardex	586.84	Used Projector - Nedco	153.43
4 No. 8B51 5-Drawer Files	401.78	Model DLS Screen	32.45
Electric Pencil Sharpener	34.98	Record Player	101.25
60 x 34 Desk	149.25	Microphone and Stand	19.40
Feeder Unit for Addressograph	936.53	Projector With Case - Slide	94.47
One KIK Step Stool	13.95	Lectern Mike	56.85
Shelving Units	238.85	Display Equipment - Flip Chart	31.74
One Scriptor Electric Typewriter	366.17	One Camera and Flash	88.98
Two 5-Drawer Files - Gray	200.98	Film Holders and Adapters	19.00
One Quant 20 Adding Machine	158.65	Metal File	95.79
Two 2 x 4 Tables	28.84	Pro Rata Share of Cost -	
Storage Cabinet	83.17	Varityper - Used	50.00
Verifax Photo Copier	296.16	Pro Rata Share of Cost - A.B.	
Walnut Oil Table	108.15	Dick Offset Duplicator	1,602.26
58" Desk Topper Shelf Unit	54.75	Pro Rata Portion of Postage	
IBM Equipment:		Mailing Machine	427.85
17 Control Panels	374.27	Pro Rata Portion of Robotyper	360.50
1 Sorter Rack	49.70	Pro Rata Portion of Perforator	121.02
5 Sets Manual Wire Complements	177.31	Pro Rata Portion of One Table	17.58
1 20 - Drawer Card File	284.96	Pro Rata Portion of Postal Scale	12.47
1 Control Panel Cabinet	71.54	Stenorette Machine No. 205817	205.06
Mosler, Fire-Proof File - 4 Drawer	319.30	Pro Rata Portion of Used Addressograph	
Cory Letter Files (3) - 5 Drawer	290.95	Machine No. 312185 With Work Table	75.00
Cosco Secretarial Chair	30.85	Pro Rata Portion of Hand Truck	3.13
Combo Binding Machine	46.95	Pro Rata Portion of Two Ginger	
Model L-H Letter Opener	58.71	Valets - No. 7-6-U	8.83
No. 3H-V Combination Horiz.-		Pro Rata Portion of One No. 11919	
Vert. File (2)	20.83	Paper Cutter	10.70
18" Pendaflex - 2 Drawer	43.78	Pro Rata Portion of Five Tables	27.78
Kruger Stool	7.21	Two 4-Drawer Files Complete With	
File Cabinets - 4 Drawer (7)	223.51	Hanger Frames	194.47
Additional Cost - Freight and Transportation		Pro Rata Portion of One Toledo Postage	
on 20 Drawer Card File (IBM) Purchased		Scale (Used)	77.25
12-31-67	23.32	One Underwood Scriptor Electric	
1 Costumer Rack	15.32	Typewriter - No. 21-8721980	337.64
2 Pebble Cork Boards	51.09	Pro Rata Portion of One Divisumma	
Underwood Electric Typewriter -		24 Calculator	327.79
700 TW	334.75	Crestline Deluxe Projector	79.26
Projection Pointer	97.00	Pro Rata Portion of One Premier	
1 Costumer Rack	21.63	Ream Cutter	129.47
1 Desk	145.23	Pro Rata Portion of One Flex-O-Build	
1 Chair	52.09	Desk End File	13.00
2 Shelving Units	66.95	Scriptor Electric Typewriter No. 8654172	300.00
1 8 Station Collator - Paper Gatherer	173.27	Pro Rata Portion of No. 1900 Addressograph	200.00
1 3M Portable Compact Copier	69.95	Pro Rata Portion of Walnut Step Table	9.24
1 TU-DROR Pendaflexor File Cabinet	63.86	Pro Rata Portion of White Table Lamb	4.09
1 Electrosumma 20 Adding Machine	184.89	Pro Rata Portion of Black Settee	30.67
1 Dual Purpose Hand Truck	47.51	Pro Rata Portion of Postal Scale	
1 F & E Checkwriting Machine	115.88	Rate Chart	16.13
1 Desk - Walnut Finish	118.97	Pro Rata Portion of Verifax Copier	159.38
TOTAL EXECUTIVE OFFICE	\$27,750.21	Pro Rata Portion of 4-Drawer	
PUBLIC RELATIONS OFFICE:		Letter File	42.75
Four Aluminum Desk Trays With		Pro Rata Portion of No. 7795	
Supports	\$ 9.00	Virco Desk	15.00
Steel Costumer	14.20	Pro Rata Portion of No. 4841 Thomas	
Cash Box	1.50	Collator	60.99
Supply Cabinet	37.00	One Carri-Voice With Microphone No. 444118	
Two Waste Baskets	7.00	and One Revere Model T-3000 Tape	
Metal Executive Desk	112.60	Recorder No. 3001312	480.00
Executive Chair	48.80	Two 8B51 Gray File Cabinets	236.66
Two Side Arm Chairs	60.40	One 8B51 Gray File Cabinet	100.57
		One 5-Drawer Gray File Cabinet	100.48
		Cosco Secretarial Chair	30.90
		Bell & Howell Projector	175.00
		File Cabinets - 4 Drawer (2)	63.86

FORWARDED

SCHEDULE 2 CONTINUED

1 8 Station Collator - Paper Gatherer 173.28
2 5-Drawer Corry Files 228.66

TOTAL PUBLIC RELATIONS OFFICE \$ 9,284.20

JOURNAL BUSINESS MANAGER'S OFFICE:

Steel File and Frame \$ 88.27
Pro Rata Share of Cost of Imperial
Safe ED "60" (Kardex) 170.77
Book - "Successful Sales Promotion" 5.65
Pro Rata Portion of Remington Electric
Typewriter No. 2129420 153.83
Pro Rata Portion of One Divisumma
24 Calculator 200.00
Pro Rata Portion of No. 1900
Addressograph 100.00
Pro Rata Portion of Verifax Copier 106.24
Stenorette Combination Unit 105.00
One Section No. 811 Hale Book Case 31.52
File Cabinets - 4 Drawer (2) 63.86

TOTAL JOURNAL BUSINESS
MANAGER'S OFFICE \$1,025.14

RURAL HEALTH AND MEDICAL CARE COMMITTEE:

Masco Tape recorder \$ 159.18
One Desk 185.40
One Steel File and Trays 121.29
One Soundscribe 150.00
Pro Rata Portion of Two Ginger
Valets - No. 7-6-U 8.83

TOTAL RURAL HEALTH AND
MEDICAL CARE COMMITTEE \$ 624.70

ANNUAL SESSIONS CONVENTION:

Portable Lectern \$ 29.67
Stenorette Machine No. 219618 205.06
Stenorette Machine No. 214740 196.75
Stenorette Machine No. 216837 196.75

TOTAL ANNUAL SESSIONS CONVENTION . . \$ 628.23

INTRA-FUNCTIONAL ACTIVITIES:

Gray Secretary's Desk \$ 224.35
Gray Secretary's Chair 36.77

TOTAL INTRA-FUNCTIONAL ACTIVITIES . . \$ 261.12

TOTAL OFFICE FURNITURE AND FIXTURES \$39,573.60

REAL ESTATE:

Land - Durham - Raleigh Highway -
(Schedule - 3) \$ 26,604.55
Land - Lane and Person Streets,
Raleigh - (Schedule - 4) 227,733.90
Construction in Progress - New Headquarters
Facility Building - (Schedule - 5) 49,364.01

OTHER ASSETS:

Capital Stock - State Medical Journal
Advertising Bureau, Inc. 200.00

TOTAL CAPITAL ASSETS - TO EXHIBIT "A" \$343,476.06

SCHEDULE-3

SCHEDULE OF LAND COSTS

DURHAM-RALEIGH HIGHWAY

12 Months Ended December 31, 1969

Options \$ 450.00
Land Purchase - Durham-Raleigh Highway 24,650.00
Legal Service 126.75
Survey and Map of Property 477.80
Architect Service 400.00
Legal Fees - Re: Rezoning, Etc. 500.00

TOTAL-TO SCHEDULE-2 \$ 26,604.55

SCHEDULE-4

SCHEDULE OF BUILDING SITE COSTS

PERSON AND LANE STREETS, RALEIGH

12 Months Ended December 31, 1969

Land Purchase - Person and Lane
Streets, Raleigh \$175,000.00
Legal Services 825.00
Survey and Map of Property -0-
Architect Service 954.00
Appraisal Fees 200.00
Photos 69.01
Cleaning Lot 75.00
Lot - 217 North Bloodworth Street 14,252.50
Lot - 222 North Person Street 36,358.39

TOTAL-TO SCHEDULE-2 \$227,733.90

SCHEDULE-5

SCHEDULE OF CONSTRUCTION IN PROGRESS

NEW HEADQUARTERS FACILITY BUILDING

12 Months Ended December 31, 1969

Worthy and Company - Consulting Services . . \$ 7,830.84
J. A. Edwards - Engineering 666.68
Geotechnical Engineering Company -
Soil Borings 1,143.50
Miscellaneous - Maps, Printings,
Lot Cleaning, etc. 377.99
Trading Services, Inc., - Demolition
of Buildings 5,000.00
G. Milton Small - Architects 34,345.00

TOTAL CONSTRUCTION IN PROGRESS-
TO SCHEDULE-2 \$ 49,364.01

effectiveness of your administrative staff and executive director. I enthusiastically welcome each and every opportunity to make a contribution both now and in the future.

Dan I. Mainer, Field Representative

REPORT OF THE AUXILIARY TO THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

Mrs. A. J. Crutchfield, President

"HANDS FOR SERVICE"

It has been a privilege and an honor to serve as President of the Auxiliary to the Medical Society of the State of North Carolina for the year 1969-1970. The cooperation and assistance I have received from your wives, our auxiliary members, has made me more cognizant of the fine people in Medicine in North Carolina. I have had cause to take pride in the work accomplished by our members at all the meetings I have attended on the National, State and County levels. I would be remiss in my feelings if I did not express to you, the Medical Society of the State of North Carolina, my heartfelt gratitude for your continued interest and generous financial help, as well as, your many kindnesses to me personally.

Dr. Edgar T. Beddingfield, Jr., President of the Medical Society of the State of North Carolina has been most helpful and willing to listen to our requests. He has made this a more effective year for the Auxiliary by his interest and leadership. I am grateful to him for inviting me to attend the meetings of the Executive Council of the Medical Society and, also, appointing one of our members, Mrs. Donald E. Swift, to the Committee on Arrangements as a Consultant.

The Staff of the Headquarters Office, Mr. James T. Barnes, Executive Vice-President; Mr. William N. Hilliard, Executive Director and Mrs. LaRue King, Office Manager, have all been most gracious. They have received my requests with interest and have been helpful on every occasion. My words are inadequate to express the depth of my gratitude for their assistance.

Dr. Roscoe D. McMillan, Chairman of the Advisory Committee, has always been ready to listen to my problems and offer his wise suggestions and help with our projects. We are fortunate to have a doctor of his stature and knowledge to advise us. "Dr. Roscoe" as he is known by most of our members has shown much interest in our work and given of his valuable time generously. We shall always be grateful to him. Dr. Louis deS. Shaffner, President-Elect of the Medical Society of the State of North Carolina, has supported our projects and meetings and I am especially proud of him as he lives in the same community as I. Forsyth County is proud of the fine contribution he is making to Medicine in North Carolina.

At the beginning of the year each county was requested to study the needs in its community and promote an Auxiliary project which would contribute

the most to better health in their area. Auxiliary members come from many walks of life and many different backgrounds but each has talents to contribute through their "Hands for Service". They were asked to remember in their zeal and desire for success to be patient, realizing that one may plant a seed, another water it, and still another may reap the harvest. There has been much work done in the related health projects. I would like to give you a short progress report.

Health Careers has been emphasized by continuing recruitment through Career Days and Careers Clubs in the schools; scholarships and loans on the college and medical school levels. The Summer Experience Program for Allied Health Professions has been encouraged. A health careers poster with a pocket containing pamphlets on health careers was promoted as a combined project of Health Careers and Doctor's Day. Surveys among students in health careers have shown, the two greatest influences on young people to choose a career in the health field are contact with the field in a working situation and the contact with their family doctor. What better place could we promote Health Manpower than in these two areas? We have asked each Auxiliary member to place the poster and pamphlets in her husbands' office on Doctor's Day as a tribute to him. Governor Robert Scott will sign a Doctor's Day Proclamation on March 4, 1970 declaring March 30, 1970 to be Doctor's Day in North Carolina.

"Our Day on the Hill", a trip to Washington, D. C. by chartered plane, March 3-4, 1970 to visit our Senators and Congressmen promises to be one of the most exciting projects the Auxiliary has ever undertaken. This is an educational as well as a pleasure trip. All making the trip will have an opportunity to visit with their Representatives to discuss current bills before Congress and express their opinions. Another purpose of the project is to promote interest in the legislative process of our Nation. Members of the Medical Society of the State of North Carolina have been invited to join us and many of them are planning to attend with their wives. At this writing ninety people have registered to attend. North Carolina is the first State Auxiliary to successfully promote this project. Mrs. William R. Flood, National Legislative Chairman for WA-AMA will be with us. We are indebted to Mrs. Ledyard DeCamp for planning this event.

The Community Health Chairman has visited several county auxiliaries encouraging them to serve as a catalyst in setting up a program on Drug Use and Abuse in their communities similar to Operation DAMN which has been so successful in Greensboro-Guilford. There has been much interest in this most worthwhile project.

An effort has been made to invite physicians' wives in counties where there is no organized Auxiliary to join as Members-At-Large. This would enable them to receive M.D.'s Wife, a publication of WA-AMA and Tar Heel Tandem, the Auxiliary to the Medical Society of the State of North Carolina's newspaper plus other information which would enable them to be better informed concerning

problems facing Medicine today.

Of course, this does not begin to relate many projects of our members, but I hope will give you some idea of the major projects promoted during the year. The membership figures are not complete for 1969-70, but we began the year with 2,655 members, 21 of which were Members-At-Large. There are 54 component Auxiliaries which include 73 counties; organized into 10 Districts. Two Districts, Third and Fifth, are 100% organized. Seventeen (17) counties reported 100% membership. Mitchell-Yancey dissolved its organization this year, and Cleveland is having difficulty, but we hope will remain organized.

As of June 30, 1969 our Sanatoria Bed Endowment Funds (4), Mental Health Research Endowment Fund and Student Loan Fund contained a total of \$75,607.77. Six hundred seven dollars and fourteen cents (\$607.14) interest from Mental Health Research Endowment Fund, was contributed to the Department of Psychiatry, University of North Carolina, Medical School with "no strings" attached, to be used as they saw fit. Three (3) loans have been made from the Student Loan Fund to Medical students and one (1) loan has been repaid, making a total of twenty-nine (29) loans outstanding. As of

AMA-ERF but this will increase before the deadline, May 31, 1970. The Student Loan Fund and the Mental Health Research Endowment Fund have both received contributions from many county auxiliaries.

Rouse Trophy (a silver vase) for The Country Doctor Museum Exhibit at the Woman's Auxiliary to the Southern Medical Association Meeting in Atlanta. This is a Research and Romance of Medicine Award. Union County was given Honorable Mention for a county under 50 members for their work in Research and Romance of Medicine, publication of a book Union Men of Medicine. The State of North Carolina received 2nd Honorable Mention for Best State Wide Observance of Doctor's Day - 1969. We are extremely proud of these accomplishments.

We are pleased to report two past presidents are serving in offices on the National level. Mrs. Amos N. Johnson, Garland, is serving the second year of her second two-year term as Director for WA-AMA. Mrs. John L. McCain, Wilson, is Southern Regional Legislative Chairman. These members represent us well, and we are very proud of them.

The Fall Conference and Leadership Conference held in Winston-Salem on September 24, 1969 was well attended and informative. The Mid-Winter Committee and Officers Conference held at The Carolina, Pinehurst, was well received. Mrs. Charles F. Wilkins, Southern Regional AMA-ERF Chairman, presented an inspiring discussion of AMA-ERF fund raising projects. Mrs. Bert Tyson, Assistant to the Executive Director of the American Cancer Society, North Carolina Division, presented their project "Reach to Recovery".

Our Auxiliary has been well represented at all National meetings. We had the full quota of delegates at the WA-AMA Meeting in New York, and all chairmen who were invited to attend the Southern

Regional Workshop in Dallas attended. Mrs. Baxter S. Troutman, President-elect, and I attended the President and President-elect's Conference in Chicago in October. I have attended all District and County Auxiliary Meetings to which I have been invited and many other meetings related to Auxiliary work.

This has been a busy but gratifying year. Your wives have accomplished much toward the improvement of health care in North Carolina. The work continued and the work begun will be felt for a long time to come. I am proud to be a member of this worthwhile organization.

Mrs. A. J. Crutchfield, President

REPORT OF COUNCILORS

FIRST MEDICAL DISTRICT

The First District of the North Carolina Medical Society has no eventful problems or solutions to report.

Our Post-graduate Extension Series was presented in January and February at Ahsokie, Edenton and Elizabeth City. This was well attended. There was much interest in the affairs of the State Society.

As Councilor I attended all meetings of the North Carolina Medical Society Executive Council. The doctors and lay-leaders have been working to alleviate the physician shortage. Progress is being made.

The Seaboard Medical Association will again meet at Nags Head in June 1970.

William H. Romm, M.D., Councilor

SECOND MEDICAL DISTRICT

All meetings of the Executive Council have been attended either by the Councilor or Vice-Councilor.

There was one incidence of indiscriminate prescribing of stimulant drugs, which was taken care of on the local level in cooperation with the State Board of Medical Examiners. To my knowledge there has been no further trouble of this nature. Otherwise, things in the Second District have gone along very well.

Ernest W. Larkin, Jr., M.D., Councilor

THIRD MEDICAL DISTRICT

The Third Medical District had another successful year, as southeastern North Carolina continues its industrial awakening.

I attended all the meetings of the Executive Council and investigated four complaints concerning physicians in the Third District.

President Beddingfield held a meeting in Wilmington of the officers of the component county medical societies which was well attended. We look forward to another harmonious year in 1970.

Frank R. Reynolds, M.D., Councilor

FOURTH MEDICAL DISTRICT

The past year has been a very quiet year within the Fourth District. No internal problems within the district were brought to the attention of the Councilor. A fairly representative turn-out was present at the headquarters meeting (President's Visitation) in Rocky Mount and I feel that this certainly tended to improve the rapport with the district and the State Headquarters office. I believe that it is a feeling that this should become an annual event.

I missed one Executive Council meeting during the year.

Harry H. Weathers, M.D., Councilor

FIFTH MEDICAL DISTRICT

Activities during the past year in the Fifth District include the formation of, or planning for, regional health councils in connection with federal government legislation which is apt to have far-reaching effects on medical practice in the future. At the present moment, most of these councils have been confined to planning programs.

The Annual Meeting of the Fifth District Medical Society was held at North Carolina County Club on October 15, 1969. This was well attended and a comprehensive scientific program presented which was well received by those attending. At the business meeting at the conclusion of the scientific session, the following officers were elected for the coming year:

President: Robert F. Willis, M.D., Hope Mills

President-Elect: William Edward Adair, Jr., M.D. Erwin

Secretary-Treasurer: Wilson Staub, M.D., Pinehurst

The Society recommended to the Nominating Committee of the State Medical Society the nomination of:

D. E. Ward, Jr., M.D., Lumberton, a term as Councilor from the Fifth District

David Bruton, M.D., Southern Pines, as Vice-Councilor

The evening social hour and dinner were enjoyed by all.

In November 1969 representatives of the various component societies met with President Ed Beddingfield in Fayetteville for discussion of present activities and problems facing the State Medical Society at the present time. This program was well conceived and definitely contributed to liaison between the various component societies of the District and the State Office.

Harry H. Summerlin, Sr., M.D., Councilor

SIXTH MEDICAL DISTRICT

A member of the Durham-Orange County Medical Society has vigorously protested the presence of cigarette advertising in the North Carolina Medical Journal. After consulting the By-Laws, I have instructed him as to the proper procedure to initiate a resolution for our meeting in May, 1970.

Other than this one incident, no request has been made or any questions asked of the Sixth District Councilor during this year.

Either Dr. John Watson or I have attended the meetings of the Executive Council during the year.

Thomas C. Worth, M.D., Councilor

SEVENTH MEDICAL DISTRICT

(Report not received as of 4/21/70)

EIGHTH MEDICAL DISTRICT

Physicians of the Eighth District are proud of our past Councilor -- Dr. Louis Shaffner, now President-Elect.

Physicians of the Guilford County Society have worked hard to assist in completion of a valuable countywide health study. This most comprehensive study includes projected needs for thirty years. Useful implementation is already under way.

There have been no major problems in this District. The Councilor has attended all meetings of the Executive Council.

Richard A. Kelly, M.D., Councilor

NINTH MEDICAL DISTRICT

The Ninth District as well as the Medical Society of the State of North Carolina was saddened by the untimely death of Councilor Paul Deaton, M.D. His representation and contributions to the affairs of the Ninth District, the State and medicine in general, will be sorely missed. Due to his death, the undersigned was elevated from Vice-Councilor to Councilor to serve the unexpired term, and J. Henry Cutchin, M.D., of Sherrills Ford was appointed Vice-Councilor for the remainder of the term.

The activities of the Ninth District were limited to those of routine matters as represented by visitations, correspondence, etc., by the Councilor. No formal meeting was held in-as-much as it was voted previously at Morganton that a meeting would be held only if a component society of the District would voluntarily serve as host and make the arrangements. Your Councilor is happy to report that communication has been held between him and the Secretary of the Caldwell County Medical Society in regards to their having a District Meeting.

The District was honored by the visit of President Beddingfield, President-elect Shaffner and others from headquarters to the Ninth District at a dinner meeting in Hickory. Officers of the component county societies of our district were present and heard the presentation of problems, plans and solutions. It was a highly informative meeting and it is hoped that such sessions will be continued

Thomas E. Fits, M.D., Councilor

TENTH MEDICAL DISTRICT

Fortunately, the activity of controversial issues has simmered down appreciably compared to the two previous years. The previous litigations and areas of unpleasantness are either in a state of legal limbo or have been settled.

All but one of the regular and called meetings of the Executive Council have been attended. Within the area of the district one of the Comprehensive Health Groups, the State of Franklin Health Council has continued to be very active with a multiplicity of on-going and potential projects. The Central Highlands Health Council is slowly and carefully exploring increased fields of activity. Two counties within the Tenth District (Mitchell and Yancey) which may be incorporated into the Eastern Appalachian Program. Therefore, every county in the Tenth District is aligned with one or another of the Comprehensive Health Programs.

For seven or eight years, meetings of the Tenth District Medical Society were abandoned because of poor attendance.

At one of Ed Beddingfield's district meetings which he started this year, it was suggested that a great deal of value could be gained by reactivating the Tenth District as a society with an annual meeting. A poll has been taken of the membership, and although several of the County Societies have yet to be heard from, the majority of votes have been in favor of the project assuming it can be organized so as to be a real benefit. Further exploration and study is proceeding with the genuine hope for a successful outcome.

George G. Gilbert, M.D., Councilor

REPORTS OF COMMISSIONS

ADMINISTRATION COMMISSION

(Report not received as of 4/21/70)

REPORT OF THE ADVISORY AND STUDY COMMISSION

With one exception, all of the Committees under this Commission met at the Mid Pines Conclave in September and a number of the Committees held other meetings during the year. The work of the several Committees has developed an increasing concern with nursing education, participation of students in the activities of the State Medical Society, direct involvement of the State Society in continuing medical education, coordination and implementation of statutes pertaining to the operation of motor vehicles emanating from the last General Assembly, updating of the relative value study, and the

presentation of the necessary changes in the Constitution and By-Laws required to implement these matters.

The long awaited history of medicine in the state of North Carolina will soon be off the press and available to the members of the Society.

The ad hoc Committee to study tenure of office has completed its work.

The several chairmen and their Committee members have worked most diligently and I would like to express my appreciation to each of them for their cooperation during the year.

Roy S. Bigham, Jr., M.D., Commissioner

ANNUAL CONVENTION COMMISSION

The various committees of my commission have been fairly active during the 1969 and thus far into 1970.

THE COMMITTEE ON AWARDS has a new chairman, Dr. F. M. Simmons Patterson, with many new members. This committee has become rather active and Dr. Patterson has made a marvelous appeal to each committee member to co-operate in carrying out the full duties possible for this committee in awards. This committee hopes to iron out much of the problems that have existed in the past between Section Chairman and choice of possible awards that could be given in each Section. Dr. Patterson is to be Congratulated on his good work with this committee.

Dr. John C. Grier, who is chairman of THE AUDIO-VISUAL POSTGRADUATE INSTRUCTION COMMITTEE, continues to be active and to carry on its duty in its usual fine way. They hope that the auxiliary members will continue to attend many of the films shown at the annual meeting, and this year's program will no doubt be very interesting to all medical people.

THE COMMITTEE ON SCIENTIFIC WORKS, chaired by Dr. Paul F. Maness, and including the Section Chairmen, had a very stimulating meeting in September at the Annual Conclave at Mid Pines. They will come up with an interesting program including many of the pressing problems of medicine today. There was also lengthy discussion on improving attendance at the general sessions and they, along with other committees, are working to bring about a more meaningful annual meeting.

Dr. Charles W. Styron, our beloved secretary who also serves as chairman of THE COMMITTEE ON ARRANGEMENTS, has done his usual fine job to try to make our annual meeting better. This committee recommended that the Sections meet on Monday and Tuesday mornings from 9 to 11, that the general sessions begin thereafter and run thru until lunch time. This would give an opportunity to attend both meetings for most physicians. The details for this annual meeting format will soon be released for members of the medical society in the annual meeting announcements.

One of the most interesting and exciting new committee actions is that of THE COMMITTEE ON SCIENTIFIC EXHIBITS chaired by Dr. Josephine Newell of Bailey, North Carolina, who is more properly known as the "Mother of the Little Doctor Museum." In the October 12 meeting of the Executive Council there was an appropriation approved of \$200 for scientific exhibits along with another \$200 for an award to a student scientific exhibit that appeared to be worthy. This is with hope to stimulate participation of younger men coming into medicine. Dr. Newell attended the AMA sessions and has given much time, travel and study to making our Scientific Exhibits at the annual meeting improved over previous years. This committee met again on January 31, at the Public Relations Committee Weekend Conclave for officers and ironed out many details and reviewed many prospective exhibits in order to try to have the very best for our membership.

THE COMMITTEE ON NECROLOGY, chaired by Dr. Otis Duck, has planned a program similar to the one in previous years with the time being during a temporary recess of the House of Delegates. With the able help of Dr. Dan Currie, their program seems to be finalized and will be rather brief and with the usual quiet good taste that you would expect from these 2 able men, assisted by Dr. J. Street Brewer. The deceased member's names will be printed in a program rather than read aloud in a lengthy dissertation.

THE CREDENTIALS COMMITTEE, chaired by Dr. Charles B. Wilkerson, Jr., has had little reason for formal action during the year, but will no doubt be on hand to carry out its duties as usual at the annual meeting in May.

Lynwood E. Williams, M.D., Commissioner

PROFESSIONAL SERVICE COMMISSION

(Report not received as of 4/21/70)

PUBLIC RELATIONS COMMISSION

In the absence of Commissioner W. Boyd Owen, the undersigned acted as Commissioner for the Public Relations Commission at the Committee Conclave held September 24 to September 27, 1969, at the Mid Pines at Pinehurst.

All of the committees under this Commission were fairly well attended, and the meetings were interesting and informative. Some of the committees are obviously quite active while others could show improvement in the establishment of programs and projects which would keep the committee active and involved throughout the year.

On Sunday, October 12, 1969, the undersigned reported to the Executive Council of the Medical Society the recommendations which the various committees under this Commission had made at the September Conclave.

The Public Relations Committee, along with the headquarters staff, planned and held a successful meeting for the County Medical Society officers and committeemen at Pinehurst on January 30 and 31. It is felt that this is a very worthwhile activity, and the details of this meeting will be reported by the Chairman of the Public Relations Committee.

I want to express my thanks to President Beddingfield for affording me the opportunity to serve as Public Relations Commissioner but regret that Dr. Owen was not able to benefit from this experience.

Sherwood W. Barefoot, M.D., Acting Commissioner

PUBLIC SERVICE COMMISSION

All the Committees of the Public Service Commission met in Pinehurst during the Conclave of Committee Meetings in September, 1969.

The MATERNAL HEALTH COMMITTEE, chairmaned by Dr. Joseph May, considered in depth the current status of the use of oral contraceptive medication in N.C. and urged each physician to carefully inform himself of the various adverse reactions to this medication and to properly select and educate the patients for whom he prescribes this medicine.

The CHRONIC ILLNESS COMMITTEE, chairmaned by Dr. Dewey Dorsett, recommended that the Medical Society of the State of N.C. support statewide application of a multi-phasic screening project if approved by the County Medical Society effected prior to the implementation of the project in the community and if a Medical Advisory Committee for that county is appointed to supervise conduction of the project (Approved). The Committee also recommended that a Governor's Conference on Arthritis be held to include both public and professional education content (Approved). The Committee is to hold a workshop nursing on home care for Committee members on April 8th, 1970.

The COMMITTEE ON DRUG ABUSE, chairmaned by Dr. Nicholas Love, endorsed the efforts of the Greensboro Branch of the Guilford County Medical Auxiliary in their operation DAMN (drugs, alcohol, marijuana and narcotics) in order that auxiliaries across the state might be influenced to undertake similar program and requested that this recommendation be transmitted to the Executive Council for endorsement and support. (Approved) The Committee on Drug Abuse studied the rapidly increasing magnitude of the drug abuse problems in N.C. and indicated that the problem is significant and that a program needs to be implemented by the Medical Society of the State of North Carolina to help solve the problem. To this end, the following program was recommended:

1. The practicing physician has responsibility in his community to furnish leadership in the approach to the problem of drug abuse in his locality. He should be informed of his responsibility by:
 - a. One or more news releases in the Public Relations Bulletin.
 - b. A guest editorial in the N. C. Medical Journal.
 - c. Appointment of County Medical Society Drug Abuse Chairmen. A guideline for his activities will be provided by the Committee on Drug Abuse.
2. Many state agencies are expressing concern and interest in the problems of drug abuse including the Department of Mental Health, State Board of Health, Department of Education, State Bureau of Investigation, Auxiliary to the Medical Society of the State of N.C., State Highway Patrol, the Legislative Study Commission on the Use of Illegal and Harmful Drugs, and others. We would like to encourage these agencies in their efforts in approaching the drug abuse problem with the recommendation that there be overall coordination of their efforts and a representative of the Drug Abuse Committee be included in their planning endeavors.
3. We recommend that the Governor be urged to sponsor a Conference on Drug Abuse in N. C. (Approved).

The MEDICINE AND RELIGION COMMITTEE, chairmaned by Dr. Jack W. Wilkerson, recommended that medical students, hospital staff, and nursing groups be encouraged to invite local clergymen to discuss at their respective meetings, how medical students, nurses and house officers can better serve the spiritual needs of their patients. The Committee recommended that interchange and coordination of efforts between the Medical Society and the N. C. Council of Churches be undertaken by sending copies of the N.C. Medical Society's PR Bulletin to the Council of Churches and the Council of Churches sending copies of their bulletin to the Medical Society (Approved).

The MENTAL HEALTH COMMITTEE, chairmaned by Dr. Paul G. Donner, officially showed their appreciation to Miss Kay Zeigler for the fine and exceptional manner in which she performed her duties to the Committee on Mental Health.

The SUBCOMMITTEE ON ALCOHOLISM, chairmaned by Dr. Donald E. McDonald, passed unanimously the following recommendation which was approved by the Committee on Mental Health:

"The Committee on Mental Health is concerned about the importance of G.S. - 2-17.1 which requires the reporting of names of persons to the Department of Motor Vehicles who are admitted to inpatient

facilities as alleged mentally ill or alcoholics. The Committee regards this to be unfair to patients seeking medical treatment. It is acknowledged that the sooner these patients receive treatment the greater the probability of recovery and the sooner they will return to productive living. Through public education programs, people with emotional and drinking problems have been encouraged to seek early treatment on a local basis. The Committee feels this reporting requirement would be an obstacle for each individual seeking treatment."

The COMMITTEE ON THE MEDICAL ASPECTS OF SPORTS, chairmaned by Dr. James R. Dineen, has had several meetings and at the present time is preparing a statement of principles on the Medical Aspects of Sports to be presented to the Executive Council at the next meeting in May.

The OCCUPATIONAL HEALTH COMMITTEE, chairmaned by Dr. John L. Brockman, is also in the process of preparing a proposed statement on Occupational Health which is hoped-will be ready for the Council's consideration by the time of the next Executive Council meeting. The Committee also recommended that the Medical Society of the State of North Carolina support preparation of a state law to be presented to the next Legislature which would bring N.C. into conformity with the requirements of federal legislation regarding Occupational Health and Safety in order to preserve the state prerogative. (Approved).

The COMMITTEE ON CHILD HEALTH, chairmaned by Dr. Richard S. Kelly, recommended that the Medical Society of the State of N. C. support pending federal legislation to provide needed funds for the communicable disease control amendments of 1969 (Approved). The Committee recommended endorsement of recommendations of the Public Health Service Advisory Committee and the American Academy of Pediatrics on Immunization Practices and that this statement be printed in the Medical Journal of the Medical Society of the State of N.C. (Approved).

The COMMITTEE ON MARRIAGE COUNSELING, chairmaned by Dr. Eleanor B. Easley, requested the Council of the State Medical Society to reaffirm its position in regards to this statement: "The Medical Society of the State of North Carolina recognize that knowledge of sex and family living is fundamental and the pursuit of happiness endorses again responsible education in these matters in schools and churches in accordance with the traditions of this country." (Approved). They recommended also that in order to provide a mechanism by which materials and programs dealing with family and sex education can be screened to assure their conforming to the high standards established by the Medical Society of the State of N.C., the Committee on Marriage Counseling and the Family Life Committee offers its services to review, on request, such materials and programs." (Approved).

I would like to express my appreciation and deep admiration to the Committees, their Chairmen and

the headquarters staff for the excellent service they have performed this year in the activities of the Public Service Commission.

John L. McCain, M.D., Chairman

DEVELOPING GOVERNMENT HEALTH PROGRAMS COMMISSION

This is a new commission for the 1969-70 year, and by realignment of some of the Society committee structure, was assigned the following committees:

Committee on Appalachia and State of Franklin; Hugh A. Matthews, M.D., Chairman.

Committee on Coastal Plains Planning; William H. Romm, M.D., Chairman.

Committee on Comprehensive Health Service Planning; Frank W. Jones, M.D., Chairman.

Committee on Social Service Programs (including Medicaid and replacing Committee of Liaison to the Department of Public Welfare and the Task Force on Title XIX); John Glasson, M.D., Chairman.

Committee on Medicare; David G. Welton, M.D., Chairman.

Individual committee reports are included in the compilation of annual reports.

All Committees met at the annual conclave held at Southern Pines In September, 1969, and others met as needed and called by the Chairmen during the year. All of the committees are to be commended for their diligence and efforts, particularly in connection with the many problems associated with the continuing function of the Medicare Program and with the implementation of the new Medicaid (Title XIX) Program in North Carolina as of January 1, 1970.

John Glasson, M.D., Commissioner

COMMITTEE ON AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION (AMA-ERF)

(Report not received as of 4/21/70)

COMMITTEE ON APPALACHIA AND THE STATE OF FRANKLIN

The Committee on Appalachia and the State of Franklin held one formal meeting, September 26, 1969. Position papers were heard on "Health Planning--the National Trend", "Pit-falls in Local Planning", and "Area Health Programs in Appalachia." Attendance was gratifying, and physicians reacted to the papers with hearty and positive interest.

Unanimously, the committeemen recommended that the Medical Society further explore the possibility of joining the North Carolina Hospital Association in sponsoring role with the Regional Council of Eastern Appalachia. View was repeatedly

re-enforced that the Medical Society assume authoritative position in legitimation, participation, and at times initiation in the health planning movement throughout the State and Nation. Consensus of opinion was that, more importantly, the inevitable planning movement could be best directed by concerned physicians in their own community.

H.A. Matthews, M.D., Chairman

COMMITTEE ON ARRANGEMENTS

The Committee on Arrangements met in Southern Pines, Thursday, September 25, 1969 to discuss plans for the Annual Sessions in May 1970. The following items were discussed and plans outlined as follows:

1. It was recommended that the Sections again meet on Monday and Tuesday mornings from 9:00 a.m. to 11:00 a.m. The General Sessions are to begin at 11:00 a.m. and adjourn at 12:30 or 1:00 p.m.
2. At the time of the meeting the Committee had not been advised in regard to guest speakers from the AMA and the Ministers for the House of Delegates General Sessions and Banquet. These will be included in the program copy.
3. The Memorial Services are to be held immediately after the convening of the First Meeting of the House of Delegates on Sunday, May 17, 1970, with a request that this service be as brief as possible due to the long agenda of the House.
4. The Arrangements Committee recommended that the President's Reception and Banquet be planned as usual. The entertainment prior to the President's Ball, as usual, will be the President's prerogative.
5. The Golf Tournament will be held on Monday and half day Tuesday. One course will be designated for the tournament and this will appear in the program.
6. The Fifty-Year Club presentations will be scheduled for the Third General Session.
7. The Committee deferred any action on the request of MEDI-CARD, INC. to be allowed to exhibition at the 1970 Meeting to the decision of the Executive Council. (This request was later accepted by the Executive Council).
8. In consultation with Mrs. Donale E. Swift of the Auxiliary, it was determined that no space is available at the Carolina to stage the Auxiliary meetings. The best prospect for these meetings of the Auxiliary is the Pinehurst Country Club. It was suggested that possibly meetings could be held in the afternoon, but Mrs. Swift felt that the

Auxiliary would prefer to have the meetings in the morning.

9. The Committee on Arrangements recommended that the Annual Meetings for the Medical Society for the year 1972 and 1973 be planned and staged at The Carolina, Pinehurst, North Carolina, and that dates for these two years be requested of the hotel and confirmation obtained.

Mr. Frank B. Ramsdell, Convention Manager, The Carolina, Pinehurst, North Carolina, extended by letter on September 23, 1969, an invitation to the Medical Society to meet at The Carolina, May 20-24, 1972 and May 19-23, 1973.

10. Expenses for the orchestra for the evening dance, 9:30-12:00 p.m. on Tuesday evening was approved by the Executive Council.

Charles W. Styron, M.D., Chairman

COMMITTEE ON ASSOCIATION OF PROFESSIONS

We have been receiving congratulations from our medical profession for obtaining the right to incorporate in last year's session of the North Carolina Legislature. We, as a committee, have thanked profusely our sister professions in the Association for their major help. Their legal representatives were of tremendous help, and all have been thanked both in person and in writing. We can all see how impossible it would have been to accomplish this without the political leverage we obtained by help from the druggists, dentists, architects, engineers, and veterinarians who make up the Association of Professions.

We are cooperating with them this year in preparation of programs for television and radio spots. These will present in an attractive way the opportunities in our profession and help us to obtain personnel in both the medical and paramedical fields.

We are asking the State Medical Society to include the dues for the Association on their bill as an optional item. Because of the length of the bill this year, it was felt well to defer this for another year. In the meantime we are encouraging the component members of the Society to include it on their bill.

We are asking the State Medical Society to give us the opportunity to contact the medical students who failed to enter medical school. We would like the first year to obtain the counsel of members of the Senior Class and members of the Junior Class of the medical schools to consult with us and the unsuccessful applicants. This would be in an effort to obtain their confidence in counseling and possible placement in other areas in the medical field. We would like to work first with the 350 North Carolina natives who have applied to the University of North Carolina, and we are sure many of these have applied to Duke and Bowman Gray as well. We know that over half of these will not be admitted, and we would like to encourage them in any way we can to enter many of the other productive fields and hope that many of

them would stay on the medical team in some capacity or other. We believe that fellow medical students would be of tremendous help in counseling and giving advice to these promising individuals, and we feel there is an obligation of the Medical Society to fill any need that we can for these people.

The medical schools and the Admissions committee have been most cooperative in this, but we do not feel it is their responsibility but should be for a large part shared by the medical professions and others who may have encouraged these people to enter the medical field.

The 7th Annual Meeting was held in Durham at the Downtowner Motel on February 26th. Featured Luncheon speaker was D. MacLaughlin Faircloth, Director, N.C. Highway Commission. ROADS are important to communication and transportation of professional services as they are to business and industrial growth--and NCAP has supported all Road Bond issues since its formation. Mr. Faircloth's remarks were well received by the group and stimulated members to think and plan further support action for continued improvement across the state.

During the Business Session, the following Officers were elected to serve for 1970-71:

President: Dr. Edward G. Batte, DVM of Raleigh
Vice-President: George G. Gilbert, M.D., of Asheville

Second Vice-President: John F. Wicker, AIA of Greensboro

Secretary: W. B. Gibbs, P.E. of Burlington

Treasurer: William H. Wilson, R. Ph. of Raleigh
L. P. Megginson, Jr., D.D.S., immediate Past-President, will continue to serve on the Executive Committee.

Dr. Batte stated at the close of the Annual Meeting one of his major interests for the year ahead was further information and education on Drug Abuse--and how it affects the family, the school, and the community.

A second project proposed by Dr. E. T. Beddingfield was support and cooperation of NCAP with the Driver Research Project at the Research Triangle.

Four Regional Meetings were agreed on for the coming year with these being held in different sections of the state to bring NCAP program closer to its members. The first meeting is scheduled for June 4th in Charlotte.

The By-Laws, first adopted in 1962 and changed again in 1964 were up-dated as of 1969 and reprinted for distribution to the membership.

Thomas G. Thurston, M.D., Chairman

COMMITTEE ON POST-GRADUATE AUDIO-VISUAL INSTRUCTION

The Committee on Post-graduate Audio-Visual Instruction met on September 26, 1969, at Mid-Pines, Southern Pines, North Carolina.

The program for the One-Hundred Sixteenth Annual Session of the Medical Society of the State of North Carolina in Pinehurst, North Carolina, May 16-20, 1970, was discussed and planned.

The final program for the 1970 meeting is recorded in the program for the Annual Session and was distributed with the April issue of the Public Relations Bulletin.

J.C. Grier, Jr., M.D., Chairman

COMMITTEE ADVISORY TO THE AUXILIARY

As usual the Auxiliary is up to its high standards of excellence for the accomplishments it has made during the past year.

The programs provided by the President have been of great interest and help to all members.

The President's theme for the year has been, "Hands for Service," with many undertakings of special interest and information too numerous to elaborate on, but of which included the following:

I Health Careers

- II More and more interest in political activities have been brought about by "Our Day On The Hill" which is to be an interesting chartered plane trip to Washington, D.C. on March 3 and 4; visiting our Senators and Congressmen; discussing various programs of interest to the medical profession.

Other projects:

I Community Health

II Mental Health Endowment

III Student Loan Fund

ARCHIVES OF MEDICAL SOCIETY HISTORY

I am so glad to tell you that after twelve years, we have almost completed the History of Medicine in North Carolina. It is my hope that by the time of the Medical Society Meeting it will be in the hands of the printers for publication.

We hope to give you an opportunity to make your advance subscription orders, to be paid for on delivery of the History in three volumes at approximately \$30 for the entire volumes.

We have had a very gratifying year in all respects.

Roscoe D. McMillan, M.D., Chairman

COMMITTEE ON SCIENTIFIC WORKS

The Committee on Scientific Works met in Southern Pines during the Committee Conclave in September, 1969, with the Chairmen of the Specialty Sections as consultants, to make plans for the scientific sessions of the Annual Meeting of the Medical Society in May 1970.

The following subjects were agreed upon as being most appropriate for the First, Second and Third General Session, Monday, Tuesday and

THE DELIVERY OF HEALTH CARE-a panel with Eugene A. Stead, Jr., M.D.; Jay M. Arena, M.D.; and Cecil G. Sheps, M.D., participating THE FUTURE OF MEDICINE AND MEDICAL EDUCATION-featuring E. Harvey Estes, M.D.; John R. Kernodle, M.D.; William B. Herring, M.D.; and T. Reed Underhill, medical student, on the panel. M.D. THE CURRENT TRENDS IN THE SOCIO-ECONOMIC ASPECTS OF HEALTH CARE-to be presented by an AMA official invited by President Beddingfield. MAN IN SPACE-presented by Alan C. Harter, M.D., Kennedy Space Center, NASA

Governor Robert W. Scott was invited to address the General Sessions and had tentatively planned to do so, but he was selected and officially confirmed as one of six governors to represent the United States at a Conference with the French Government during the period of May 12-24; therefore he had to decline the invitation.

The preliminary program will be found in the March issue of the North Carolina Medical Journal and the official program will be printed and distributed prior to the Annual Meeting and will be available also at the Annual Meeting.

Paul F. Maness, M.D., Chairman

BLUE RIBBON COMMITTEE NO. 1

During the past year Blue Ribbon Committee No. 1 has met with representatives from Rothrock, Reynolds, and Reynolds, Management Consultants, of Miami, Florida; and made recommendations to the Executive Council that this organization be employed to study operation of headquarters of the Medical Society. This study was duly authorized and a report returned to the Executive Council and to the Blue Ribbon Committee No. 1.

In a joint meeting of the two bodies, the report was studied in detail and subsequently the recommendations were implemented by the Executive Council.

The final area of study of the Blue Ribbon Committee No. 1 is to be committee structure of the Medical Society, but there is no report from this Committee on this phase of study yet.

Jesse P. Chapman, Jr., M.D., Chairman

COUNCIL ON PLANNING BLUE RIBBON NO. 2

This council was constituted two years ago on the recommendation of Doctor Frank Jones. The rationale being that the past presidents and appointed Society officers should have a sense of history, function in the present day and be alert to developing trends and possible enactments which might influence the function of the Society in its effort toward delivering the best possible medical care.

Since then, a Committee on Developing Federal Health Programs, with assigned sub-committees, one on "Education" and others have been activated. This, however, does not interfere with the major purpose of the committee nor does the committee pre-empt any of the functions of committees such as Blue Shield, Blue Ribbon No. 1, Legislation, Nursing, and the Ad Hoc committees on Relationship with Blue Shield and Taskforce for Title XIX.

The membership includes representation on state commissions and councils, national societies and advisory groups and specialty societies.

There have been two meetings when a variety of pertinent topics were discussed at length; the two main topics were professional and ancillary health personnel, its distribution and shortage and local state and federal legislation. Doctor Jones has presented these discussions in succinct and orderly fashion to the Executive Council. One recommendation that produced favorable action was to utilize the talent and years of service of the commissioners by allowing them to vote on the Executive Council actions.

As various committees change or have fulfilled their purpose, this committee can maintain continuity, advise without intruding and serve as a ready source of background information, current opinion and a positive aid in directing the future course and welfare of the Society.

Robert A. Ross, M.D., Chairman

COMMITTEE ON BLUE SHIELD

At the 1969 annual meeting the House of Delegates accepted and approved recommendations from the ad hoc Committee on Relations with North Carolina Blue Cross and Blue Shield, as proposed by the Chairman, Dr. John S. Rhodes. This action clarified the function and responsibilities of the Blue Shield Committee by the terms of the revised "Statement of Understanding" which was approved by the House of Delegates and the Corporation Board of Trustees and was signed in June, 1969 by the President of the Medical Society and the Corporation. Although this has been reproduced in a Physician's Manual and Blue Shield Index distributed to all physicians, it seems appropriate to reproduce in this report Section III of the agreement pertaining to the Blue Shield Committee.

III. THE BLUE SHIELD COMMITTEE OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

The Medical Society shall elect a group of physicians as a committee of the Medical Society in accordance with the Constitution and By-Laws of the Medical Society.

Subject to jurisdiction of the Executive Council and House of Delegates of the Medical Society, the Board of Trustees of the Corporation, the North Carolina Department of Insurance, and applicable laws, the Blue

Shield Committee with respect to Blue Cross and Blue Shield subscriber benefits for services provided by physicians licensed to practice medicine and surgery shall represent and act for the Medical Society and have the following rights and privileges:

1. To increase, decrease, add to, or delete indemnity scheduled allowances.
2. To assign equitable allowances for professional services of a new, unusual, or complicated nature which are within the scope of certificate benefits but not specifically listed in schedules of professional benefits.
3. To determine allowances when benefits are paid on the basis of usual, customary and reasonable charges.
4. To arbitrate benefit allowances in cases disputed by physicians, or the Corporation.
5. To assign partial allowances or allowances reduced on a percentage basis when multiple procedures or services are provided, or when services are provided concurrently by two or more physicians.
6. To advise and counsel, when requested by the Corporation or upon its own volition, concerning all aspects of subscriber contracts and the Corporation's communication with physicians through use of publications, letters, and personal contacts by the Corporation's Professional Relations representatives.
7. The physician members of the Board of Trustees of North Carolina Blue Cross and Blue Shield may meet with the Blue Shield Committee at the request of the Committee Chairman or the Trustees.

During the past year all of the seven listed functions have engaged the Committee's attention.

Another recommendation of the Rhodes Committee was to arrange for the Chairman of the Blue Shield Committee to meet with North Carolina Blue Cross and Blue Shield's Board of Trustees as an ad hoc member. This recommendation was adopted and your Chairman can report that he has attended the Board functions regularly and believes this additional contact between the Physician Trustees and the Blue Shield Committee has resulted in improved liaison and a better insight into problems which mutually concern the Trustees and the Committee.

The Committee function of determining allowances when benefits are paid on the basis of usual, customary and reasonable charges has been a

major responsibility. All subscribers of the new certificate have some form of UCR benefits under the outpatient section of the certificate and the majority of subscribers have additional UCR benefits under basis Surgical- Medical coverage, or Extended Benefits or Major Medical contracts.

Many cases requiring adjudication involve complex or unusual services; however, statistical data is also necessary to determine customary allowances for the uncomplicated case. We can report that the Corporation's expanded computer facilities have enabled the Committee to receive good computer data on usual charges by procedure and specialty and this technique will be expanded and refined on a continuing basis.

The four-member Claims Review Subcommittee meets monthly, usually the fourth Thursday, and reviews anywhere from 20 to 40 cases. Subcommittee members receive from the Corporation travel reimbursement and a small honorarium in connection with claims review sessions. In the odd-numbered months there is an evening dinner meeting with the full Committee attended by all members and consultants. The full Committee considers matters of policy and reviews individual adjudication cases upon request of attending physicians or upon referral of the subcommittee when circumstances indicate that policy or precedent is involved. No travel expense or other compensation is paid in connection with full Committee meetings which are considered exclusively a Medical Society function; however, the Corporation usually covers the dinner costs.

A further recommendation of the Rhodes Committee adopted by the House of Delegates, which will become effective in 1970, was to expand the Blue Shield Committee to include two representatives from each of 13 specialty organizations in such manner that there would also be two representatives from each of the 10 Medical Society Districts. The Committee and the Corporation welcome this expansion of Committee resources and believe that the greater availability of specialty and area representation will facilitate the work of the Committee.

By assignment of the President in 1968, the Blue Shield Committee was given additional responsibility for adjudication of claims submitted on behalf of beneficiaries under programs of the State Department of Social Services which are administered by Blue Cross and Blue Shield. While this was not too burdensome in 1969 during which time the state was paying physicians on the basis of nominal dollar conversion factors for scheduled relative value units, it is likely that the adjudication case load will increase under the 1970 Medicaid Program which provides payment on the basis of usual, customary and reasonable charges up to the 75th percentile level.

The Committee has made maximum use of the consultants assigned to it and requested their advance specialty recommendations on adjudication cases. In all probability, it will become necessary to establish regional Blue Shield claims review subcommittees and work more closely with district societies and hospital utilization committees.

The Committee believes that it is essential that the medical profession provide self discipline with regard to reasonable charges and proper utilization of medical service; and if costs are not controlled, there is real danger of complete government intervention. The Committee urges the Medical Society to inform its members on a continuing basis of the need for exercising this responsibility.

The Committee would like to emphasize that it is necessary for only a small fraction of one percent of Blue Shield claims to come to the attention of the Committee for peer review. This speaks well for the medical profession in North Carolina. It was found necessary to refer only one case to the Board of Medical Examiners in a situation which appeared to involve gross over-utilization of services and repeated injection of drugs considered to be equally effective by mouth.

UCR benefits have many advantages over fixed-fee schedules and are officially preferred by organized medicine for third-party payments. Nevertheless, administration is a sensitive matter. In all cases when reasonable charges are determined to be less than billed charges, the physician is notified and given the opportunity to correct any error, or provide additional information, and request further review. In many cases we find that there has been a misunderstanding or billing error and the physician is willing to abide by the Committee determination, or provide details of unusual, time-consuming, or difficult circumstances which justify his charge.

During 1969 there was considerable interest and activity in revised procedure codes, nomenclature and relative values. The California Medical Association adopted a new 1969 Relative Value Study. The Committee was pleased to have Dr. Arthur E. David, Chairman of the North Carolina Medical Society Relative Value Committee, to report on this at one of its meetings. The AMA voted to incorporate the new five-digit California procedure codes and nomenclature in its Standard Medical Terminology publication. National Blue Shield does not at the present recommend adoption and believes that a four-place procedure code is still adequate and cites considerable computer difficulty and expense in converting to a new system. The Blue Shield Committee will endeavor to carry out the wishes of the Medical Society in this regard, and North Carolina Blue Cross and Blue Shield is not adverse to a progressive change bearing in mind that considerable tool-up time will be necessary for the reprinting of schedules, notices to groups and subscribers holding indemnity scheduled benefits, and reprogramming of computer operations.

In January, 1970, the Committee had a special meeting with a committee appointed by the North Carolina Society of Anesthesiologists. The anesthesiologists were concerned that the number of practitioners in their specialty had not increased appreciably and were concerned that hospital practices and Blue Cross and Blue Shield benefit structure was not conducive to progress in the private practice of anesthesiology. It is felt that good communication was established and will be

continued. The Committee has requested the Corporation Board of Trustees to study the problem further.

The Committee anticipates future meetings with plastic surgery specialists because of problems in determining allowances for services. This is brought about by variability of procedures and some difficulty in interpreting plastic surgical services in terms of specific nomenclature, codes, unit values, and percentile values.

The Committee also anticipates future liaison and meeting with representatives of the three medical schools and their respective PDC offices with regard to establishing a better basis of understanding for determination of Blue Shield allowances for services provided in a teaching setting.

In October, 1969 the Chairman attended the annual Program Conference of the National Association of Blue Shield Plans. This was a worthwhile meeting and provided opportunity to hear and discuss current and future aspects of health care prepayment with physicians and Blue Shield officials from all parts of the country.

As a result of past year activities, the Committee further recommends that physicians providing surgical assistance service submit independent claims in their own names and with their own statement of charges. The Committee also recommends that physicians ordering services such as diagnostic xrays or laboratory tests by referral to another physician or through a hospital outpatient department supply sufficient information as to symptoms or diagnosis, accident or non-accident cause, etc., so as to permit the referral physician or hospital to submit a Blue Shield or Blue Cross claim on an independent basis.

The Blue Shield Committee has received excellent cooperation and assistance from the officers and staff of North Carolina Blue Cross and Blue Shield, the executive office of the State Medical Society, and the President, President-Elect, and the Chairman of the Professional Service Commission under which the Blue Shield Committee operates.

Robert P. Crouch, M.D., Chairman

COMMITTEE ON CANCER

The Committee met at Southern Pines September 26, 1969.

After more than eight years of negotiations definitive plans were drawn for elimination of private Pap smears from the State Board of Health Cytology Laboratory. The Committee has heard from private Pathologists that Pap smears are available to both private and charity patients through private facilities. Whereas the State Board of Health Cytology Laboratory has served a useful purpose in increasing the numbers of Pap smears done in the State during its years of existence, it is hoped that this service will now be reduced to those submitted from Cancer Clinics, State Institutions, and other public or screening sources. January 1, 1971 has been established as a cut-off date after which State Board of Health will not carry out Papanicolaou screening

examinations on slides from private practitioners. This date will be announced in a letter mailed January 1970 and will allow a year to re-channel these smears to private laboratories and pathologists. A list of available private services has been mailed to practitioners from the State Board of Health.

Dr. Isa Grant reported to the State Board of Health an increase in Pap smears to 260,000 last year, an increase of 15,000 over 1968. She also reported publication of a booklet "Guide for Cancer Diagnosis and Treatment of Cancer Patients" - Division of Personal Health, Chronic Disease Section, Cancer Program. A corrected version of this document was approved by the Committee for distribution to physicians. Dr. Grant also showed statistics from the new Cancer Registry and reported a gradual trend toward increase of cancer death with the highest rates in the far East and far West of the State.

Dr. Simmons Patterson of the Regional Medical Program reported the progress of the Cancer Registry and the Cancer Information Service. There are ten hospitals involved in the Cancer Registry. RMP now has six Cancer Programs in operation, including an Educational Program in the Wilmington area.

Dr. William Robie reported for the North Carolina Division of the American Cancer Society providing a list of grants from ACS to North Carolina Institutions totalling \$512,458.00.

Report from the North Carolina Cancer Institute, Lumberton, North Carolina, was 185 admissions last year with current census of 35 with a Staff of 52 members.

Authorization to operate under the Cancer Hospitalization Program for the State Board of Health was granted the J. Arthur Doshier Memorial Hospital, Southport, Granville Hospital, Oxford, Washington County Hospital, Plymouth.

Approval was given for the operation of a Cancer Detection Clinic at Lincoln Hospital in Durham.

The Committee requested the Executive Council to permit establishment of a Sub-Committee to study development and funding of a project on Cancer Mortality Study comparable to the Maternal Mortality Study. This study, if initiated, would be primarily for review of cancer deaths and "feed-back" of education to the doctors involved. While similar to the Maternal Mortality Review, it differs in a number of important ways. The Sub-Committee's initial purpose would be to explore this concept and to report back with proposals regarding organization and funding. This request was approved by the Executive Council.

Lewis S. Thorp, M.D., Chairman

COMMITTEE ON CHILD HEALTH AND IMMUNIZATION

The Committee on Child Health and Immunizations held its annual meeting September 24, 1969 at the conclave of committees of the Medical Society of the State of North Carolina at the Mid Pines Club, Southern Pines, North Carolina.

A review of the immunization programs that

have been undertaken in the state was given. An estimate of the extent of use and effectiveness of the rubella vaccine was made by various members of the Immunization Activity Section of the State Board of Health. It was felt that reasonable control of the disease was being accomplished but emphasis was placed on the necessity to get each year's new group of susceptibles immunized.

A briefing was given on the current status of the rubella vaccine- supply, cost, availability. It was decided that at the moment a statewide publicity program or actual mass campaign was premature due to limited supply and cost. Some local and county programs have already been undertaken successfully. Mr. Henry Woodard of the State Board of Health reported on the sites and effectiveness of these campaigns.

In an effort to get rubella vaccine in public clinics it was recommended that the Executive Council of the Medical Society of the State of North Carolina send letters to Congressmen Pryor and Broyhill soliciting their support for the Communicable Disease Control amendment of 1969, and that this Committee send letters to all North Carolina congressmen and senators enlisting their aid and support. This committee also endorsed the Public Health Service and American Academy of Pediatrics recommendations on Immunization practices in regard to rubella vaccine and will request they be printed in the North Carolina Medical Journal. Recommendations of a schedule of immunizations and advice on what combinations of vaccines may be safely and effectively used simultaneously was to be worked up and printed in the Journal.

Richard S. Kelly, Jr., M.D., Chairman

COMMITTEE ON CHRONIC ILLNESS

The last meeting of the Chronic Illness Committee was held in Southern Pines on September 24, 1969. Dr. Sylvester Vala of the State Board of Health, gave a comprehensive report on the multi-phasic screening project being conducted by the State Board of Health. The Committee recommended to the Executive Council that the Medical Society approve the extension of multi-phasic projects to interested counties where complete approval of the county medical society affected is secured prior to implementation and where a medical advisory committee is created to guide the project for the county.

Dr. Ted Scurletis, next, discussed new definitions of nursing homes and other long term care facilities and emphasized the importance of proper patient placement in such facilities.

The Committee received a letter from the Arthritis Foundation requesting support from the Medical Society for a proposed Governor's Conference on Arthritis. The Committee recommended that the Society endorse the proposed conference and suggested that the program should include public as well as professional educational material.

Dr. Isa Grant reported on the Conference on Aging held in Ann Arbor, Michigan, which she attended as a representative of the Committee.

The Committee approved plans for holding a workshop on problems of medical care in nursing homes and other long term facilities. This workshop will be held in Chapel Hill on April 8, 1970.

J. Dewey Dorsett, Jr., M.D., Chairman

COASTAL PLAINS PLANNING DEVELOPMENT COMMISSION

(Report not received as of 4/21/70)

COMMITTEE ON COMMUNITY HEALTH (RURAL-URBAN)

The Committee met in September, 1969 and December, 1969. Various members met as a steering committee for the organization of a conference on environmental health which will be held in April, 1970.

The committee continued its interest in traffic safety, malnutrition, air and water pollution and has expressed interest in pesticides. It has continued to recognize the importance that is being done by the 4-H program in the state, and has continued to help sponsoring the attendance of the State 4-H Health King or Queen at the National 4-H Meeting in Chicago. The Committee also furnishes certificates to the County 4-H Health Kings and Queens.

The Committee will act as the sponsoring committee of the Medical Society for the first State Conference on Environmental Health. In view of the growing magnitude of environmental health problems, the Committee has urged the establishment of a Committee on Environmental Health.

As problems of health become more and more a concern of the community, this committee feels that there will be an ever widening area of concern by organized medicine in the area of Community Health.

Edward L. Boyette, M.D., Chairman

COMMITTEE ON COMPREHENSIVE HEALTH PLANNING SERVICES (Commission VII)

The Committee on Comprehensive Health Planning Services of the MSSNC makes this report on its activities during the period of June 1, 1969 - February 1, 1970, and comments upon some of the developments in the area of Comprehensive Health Planning which have occurred during that period.

Due to the almost overriding influence of State planning efforts and the requirements of Federal Legislation, it is necessary that this report also contain relevant occurrences in those areas as well as the occurrences and activities of this committee. The committee continues to plead for voluntary, aggressive involvement of M.D.s over the State in

Regional (local) Planning Councils and Task Forces of State level planning and development programs to the end that the people whom we serve will have the benefit of intelligent and informed input into the overall plan which will ultimately develop.

One in-depth meeting of the full committee was held at the time of the Fall Conclave. Attendance and participation were excellent. The committee for the 116th administrative year heard briefings on Public Law 89-749 and Public Law 90-174 as to the substance and intent of these enactments.

Mr. Elmer Johnson of the North Carolina Office of Comprehensive Health Planning analyzed the interests and activities of that agency.

Reports of the activities of some of the Regional or Area Health Planning Councils in the State at the time were given by Doctors Thomas Dulin, James Lipsey, Mary M. McLeod, John McCain, and Norris Smith, all of whom are members of the committee.

It has been, and is, the sense of this committee that:

- A. More professionally oriented people should participate in the establishment of and the ongoing activities at decision level of Regional Health Planning Councils.
- B. There are jurisdictional conflicts between existing health planning councils and economic development planning commissions in some area in this State.
- C. The application of the dictum providing that the majority of members of health planning councils be consumers was being inaccurately interpreted in the definition of providers of care. The committee strongly felt that health planning was being thus deprived of much of its already informed and experience-educated intelligence. It was apparent that the health provider professionals were disillusioned and became apathetic in their efforts due to the extensive time and effort wastage expended in the primary education of non-health oriented individuals with reference to problems, goals, and needs.
- D. There was excessive duplication of some modalities of care with a total lack of other needed facilities and functions in the health care field within this State, and that there was a dearth of interrelated planning activities most particular in the health field.

Recommendations were made to the Executive Council of this Society by way of Commissioner Glasson in the area of Comprehensive Health Planning Services. Some of these suggestions were favorably acted upon by the Council and undoubtedly will be recorded in the Actions of the Executive Council during this administrative year.

Updating of the Medical Society Manual on Comprehensive Health Planning is presently in progress by the committee with the able assistance of the Headquarters' Staff. The revision will again be sent to the component Society presidents and the State Society officers.

Whereas, the activities of the Regional Health Planning Councils, including grant applications for financial assistance, are so dependent upon the actions of the Governor's Advisory Council on CHP and the Office of CHP in the Department of Administration, cognizance of the activities of these bodies has been carefully monitored by the Society. The six initial task forces in State Health Planning, including (1) Rehabilitation and Restorative Services, (2) Environmental Health, (3) Protective and Supportive Services for the Chronically Ill and Disabled, (4) Screening and Early Detection, (5) Prevention of Disease and Health Promotion, and (6) Diagnosis and Treatment, have now made their reports to the Advisory Council and phase two task forces are developing further reports in an attempt to coordinate and remedy the areas of concern developed by the probings and opinions of the initial task forces. Some doctors of medicine have served on these task forces; others have been asked to serve and have not been exactly diligent in their efforts to attend.

As of the preparation of this report on January 30, 1970, several new developments on the State scene in the area of planning have been announced. These developments will certainly have considerable impact upon the development and activities of the Regional Planning Councils.

The Office of Comprehensive Health Planning has been absorbed into the North Carolina State Planning Division of the Department of Administration. Mr. Elmer Johnson, formerly Deputy Director of the Office of Comprehensive Health Planning, is now attached to this division and will have as his major duties the health services planning segment of the general planning effort.

Even more recently, State Government has divided North Carolina into fifteen proposed regions. The currently proposed multicounty divisions is an effort toward total planning for the State by sectionalization or regionalization. This may lead to less overlapping and fragmentation of the application of State and Federal programs. Undoubtedly, there will be objections to the currently proposed regions by some of the involved counties. This may lead to some revisions of the boundaries. Governor Scott probably will confirm and finally establish the creation of the planning regions for economic, health, law enforcement, and other aspects, within the next several months.

The Medical Society Committee on Comprehensive Health Planning Services is aware of the fairly recently established minimal requirements for Regional Health Planning Councils and will instigate the distribution of these dicta to component societies soon.

The committee is quite aware of the need for a continuing program of education and communication of information to the membership of this Society regarding Comprehensive Health Planning. It will attempt, with the support of the officers and the help of the Headquarters' Staff, to provide such to the

membership by way of the component county societies.

Frank W. Jones, M.D., Chairman

CONSTITUTION AND BY-LAWS

The Committee on Constitution and By-Laws met at the Mid-Pines Club, Southern Pines, N. C. on September 25, 1969. All members of the committee were present. After considerable discussion, the committee approved a motion that a vice councilor be given an equal and full vote as the councilor has in the House of Delegates. This is actually the committee's interpretation of the present wording of the Constitution and By-Laws, and is intended as a matter of clarification for the Executive Council and the membership. After lengthy discussion, the committee voted to defer the recommendation from the Blue Ribbon Number Two Committee to make Commissioners voting members of the Executive Council pending knowledge, reaction, and direction of the Executive Council to this proposal. The committee approved a motion that 500 copies of the Constitution and By-Laws be printed, as it now exists, by the cheapest and most efficient means possible for distribution to delegates at the annual meeting and for distribution to members on request during the subsequent year. Subsequently on February 1, 1970, the Executive Council ordered that a copy of the Constitution and By-Laws be sent to each delegate prior to the annual meeting of the House of Delegates in May, 1970.

H. J. Carr, Jr., M.D., Chairman

COMMITTEE ON DISASTER MEDICAL CARE

During the past year activities of this Committee have been largely confined to Emergency Medical Services. A course for the training of Emergency Medical Care Technicians and a Survey of Hospital Emergency Rooms have been the two principle objectives.

Dr. Michele Bourgeois-Gavardin had presented a one year training program leading to certification of Emergency Medical Care Technicians. This course, sponsored jointly by Watts Hospital and Duke Medical Center would give intensive, didactic and practical training to selected individuals, i.e.,

Ambulance attendants, Rescue workers, etc. Sponsored by this Committee and endorsed by the State Society, the plan was submitted for consideration to the Governor's Highway Safety Program. Changes in administrative policy and a shortage of funds have kept this plan from being enacted.

Following the Committee's recommendations made one year ago, an Ad Hoc Committee of Hospital Emergency Services has been active. Working with the Medical Care Commission, this group has met on several occasions. Under consideration are:

1. The need for every licensed hospital to maintain an Emergency Room.
2. The consolidation of services in a community where there is more than one hospital.
3. The categorization of all hospital emergency rooms throughout the State.

When completed this will be the initial step designed to better the Emergency Care throughout the State.

George A. Watson, M.D., Chairman

COMMITTEE ON DRUG ABUSE

The Committee met September 25, 1969 at the Mid Pines Club in Southern Pines and reviewed the activities of the first such Committee, 1968, as presented by its Chairman, Dr. Hamilton W. Stevens.

A representative of the Guilford County Medical Auxiliary presented their efforts in project Operation DAMN (Drugs, Alcohol, Marijuana, Narcotics). This Committee endorsed their efforts, but no opinion on the program could be considered in-as-much as the program was not offered for consideration.

The Committee discussed and recognized the moral liability of a physician prescribing drugs that could affect public and personal health and especially highway safety. The Committee recommended that members of the Medical Society of the State of North Carolina warn and advise their patients verbally at the time of prescribing drugs which might be included in this category, and to enter a note to that effect in their office records.

During the discussion of the extent of Drug Abuse in North Carolina today, it became apparent that no statistics were immediately available to this Committee. A Subcommittee was appointed to meet with representatives of the State Bureau of Investigation, the Highway Patrol and the Institute of Government, and to present a report at the next regular meeting scheduled for December 12, 1969 at the Institute of Government in Chapel Hill.

At the appointed time and place this Subcommittee presented a report which revealed involvement of all major racial, social and economic groups. The junior high school through college age groups of middle to upper economic level families seemed to predominate. There appeared to be a probable correlation with an increased crime rate,

single car automobile accidents, increased sexual activity, and possibly with accidental deaths and suicides. The consensus of this Subcommittee and the previously mentioned agencies with whom it met was that Laws and Law Enforcement alone could not control this problem; but rather, a multidiscipline approach also involving Education Facilities, Mental Health, Pharmaceutical and other Health disciplines, as well as social organization must be involved.

The Committee on Drug Abuse recommended:

1. The practicing physician has a responsibility in his community concerning this problem and that some information concerning this be presented in the Public Relations Bulletin, North Carolina Medical Journal and that some suggestions be provided to the County Medical Societies. A Subcommittee was appointed to implement this recommendation.
2. Encouragement be given toward the goal of sharing of knowledge and cooperation of efforts of the various Agencies involved in managing this problem.
3. That the Governor be urged to sponsor a Conference on Drug Abuse in North Carolina.

Subsequently, the Governor has appointed a Legislative Study Commission, as per Senate Joint Resolution 567, ratified by the 1969 General Assembly. This Study Commission has called for a mid-April Governor's Conference on Drug Abuse. Dr. R. J. Blackley, Deputy Commissioner of Alcoholism of the North Carolina Department of Mental Health chaired a multidiscipline Orientation Seminar on Drug Abuse on January 28.

Mr. Charles Dunn, Director of the State Bureau of Investigation, who is Consultant to this Committee, has made statistics concerning Drug Abuse available to the public via multiple news media.

This Committee feels that we, the Medical Society of the State of North Carolina, and the public have a much better concept of the extent of Drug Abuse than we had at our September meeting. We acknowledge that much work needs to be done by many different people and that no easy answers are apparent.

We feel that our first goal was to define the extent of the problem, and the second was to encourage involvement of the various appropriate Agencies in a cooperative approach to Drug Abuse. We urge each member of the Medical Society of the State of North Carolina to be cognizant of this problem and to endeavor locally to alleviate it.

Nicholas A. Love, M.D., Chairman

COMMITTEE ON SCIENTIFIC EXHIBITS

The Committee on Scientific Exhibits met in Southern Pines during the committee conclaves in

September 1969 and discussed methods of obtaining exhibits for display at the annual meeting. Various members of the committee were asked to solicit exhibits at the meetings they would be attending throughout the year. The Chairman reported she would be attending the Clinical Convention of the AMA in Denver in December and would monitor the scientific exhibits there, provide applications for exhibit space to anyone interested in an effort to solicit exhibits.

The Committee met again on January 31, 1970 in Pinehurst to review the exhibit applications and make final selections. Selections were made and letters written to those selected notifying them of the acceptance of their exhibits. Complete instructions as to shipping, manning exhibits, details with regard to hours exhibits would be on display were furnished at the time of acceptance. Twenty-five scientific exhibits have been accepted and we urge all physicians to visit the Scientific Exhibits in the South Room of The Carolina.

VISIT THE TECHNICAL EXHIBITS-Fifty-five of the outstanding pharmaceutical firms across the country have purchased space in the technical exhibit area. Tremendous effort has been exerted by these pharmaceutical firms to send their exhibits and representatives to our Annual Meeting to present to all physicians registered the very latest in products they have available.

Show your appreciation for the efforts of these firms by visiting the Technical Exhibit area as often as possible.

Josephine E. Newell, M.D., Chairman

COMMITTEE ON EYE CARE AND EYE BANK

The Committee on Eye Care and the Eye Bank met in September in Southern Pines.

During the past year the North Carolina State Commission for the Blind was reorganized. Governor Scott appointed three optometrists and three ophthalmologists to a Professional Advisory Board to serve as a liaison group with the Commission. Since this represents the first time that non-medical personnel have had an official advisory relationship with the Commission, the Eye Care Committee has followed closely the decisions made by this Advisory Board. In close cooperation with the Society and President Beddingfield, several matters have been discussed with those ophthalmologists advising the Commission for the Blind:

1. The rising cost of eyeglasses was noted during the Committee meeting. The Executive Council and the Society were asked to join this Committee's recommendation that the Commission for the Blind continue eyeglass procurement on a contract basis with licensed optical firms. It was felt that procurement of eyewear from practitioners would result in a marked increase in the cost of such materials to the State.
2. Patients are guaranteed freedom of choice in selecting a refractionist under both Blind

Commission, Medicare and Medicaid programs. The Eye Care Committee felt that patients should understand the difference between an optometrist and a physician skilled in diseases of the eye in order to intelligently select a practitioner under these programs.

3. In answer to requests for information and for guidelines from several ophthalmologists, the Committee strongly felt that the post-operative care of eye surgery patients - including the first post operative refraction for the purpose of fitting eyeglasses - was the responsibility of the surgeon who had performed the surgery or another physician.

The discrepancy in fee schedules between the Blind Commission and other State and Federal programs was noted. The Committee reiterated the Medical Society position of billing for usual and customary fees.

The Eye Bank for Sight Restoration continues to function well and to grow in volume of services rendered. There were no immediate problems brought up at the Committee meeting.

Shahane R. Taylor, Jr., M.D., Chairman

COMMITTEE ON FINANCE

The Finance Committee has authorized continuing audits of the receipts and disbursements of the Society and an annual auditor's report is presented with this Compilation of Reports. The Committee, after meeting with the Commissioners and other interested officers of the Society, has prepared a budget as a guide to the disbursement of the Society's funds. This has been presented to the House of Delegates for approval or disapproval.

The financial condition of the Society is good and present dues are adequate. We are confident that the Society will be able to finance the completion of the headquarters building without difficulty providing there is no major new expenses for the next three years.

The Committee is trying to cope with the intricacies of adequate compensation for our employees but would welcome help from any member having expert knowledge in this field. In office personnel the Society does have to compete with the rich and powerful competitors -- the State and Federal Government.

Wayne J. Benton, M.D., Chairman

COMMITTEE ON HEADQUARTERS FACILITIES AND PLANNING

Upon recommendation by your committee, the House of Delegates agreed to increase the foundations of the new building allowing an additional two floors in future years.

In August 1969, an adjacent lot on Person Street was purchased allowing a much improved setting for

the building and actually a necessary addition for the four-story future structure.

In September, plans and specifications were completed and approved. Bid invitations were sent out. In October and November, multiple bids were received and reviewed. By telephone conference the Executive Council agreed with the committee decision to award the general contract to Carl Mims General Contractor of Raleigh; plumbing to Mechanical Associates and electrical to Bryant Durham.

On December 11, 1969, there was a public ground-breaking, Dr. Edgar Beddingfield presiding.

The heating and air conditioning contract was bid, reviewed and awarded to Stahl-Rider in January.

During January, February and March, despite weeks of bad weather, construction has proceeded satisfactorily.

Occupancy date now stands at February 1, 1971.

A. Hewitt Rose, M.D., Chairman

COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS

- I. This committee has not received any request from any physicians for a hearing or assistance in relation to any difficulties with medical hospital staff members.
- II. In relation to physicians serving on Boards of Trustees of hospitals the Duke Endowment recently wrote to a hospital outlining its position in this matter at the present time. They do not directly recommend such appointments, but they do not actively oppose them as they have done in the past. Their present position is that this is a local problem which may be different in different communities and that they would not presume to make a recommendation one way or another.
- III. The committee had a question referred to it regarding the question of ethics in relation to a physician taking x-rays for podiatrists. The question has been referred to the N. C. Chapter, American College of Radiologist for opinion and recommendation as to the appropriateness of a Radiologist interpreting x-ray for podiatrist.
- IV. The Committee recommended last fall that the Medical Society take up the question of certification of qualified physicians for the treatment of patients under the Crippled Children's Program of the State Board of Health. This was referred to the State Board of Health for consideration. It is interesting to note, also, that the North Carolina Chapter of the American College of Surgeons has taken up this question at its annual meeting and it is hoped that their efforts and the request of the State

Medical Society will lead to a satisfactory solution of the problem with the State Board of Health in this matter.

J. M. Van Hoy, M.D., Chairman

COMMITTEE TO WORK WITH N. C. INDUSTRIAL COMMISSION

The committee has continued to push for the usual and customary fee concept in industrial cases during the past year. It appears as if the advent of a new chairman of the Industrial Commission may at long last bring some new light in this regard. Our committee had a lengthy meeting at Mid Pines in September of 1969, at which time it was apparent that progress with the Industrial Commission was about at a standstill because of the illness and possible retirement of the then chairman of the Commission.

Since that time a new chairman of the Commission has been appointed and recently the president of the State Medical Society, the chairman of our committee and Dr. Tom Dameron met in Raleigh with the present chairman, Mr. Joshua James, and the other commissioners, Mr. Forrest Shuford and Mr. William Marshall. After a rather prolonged discussion regarding the usual and customary charge procedure now used with Medicare and Medicaid patients and an explanation of fee profiles, etc., the Commission agreed to consider the possibility of using such a procedure in handling industrial cases. An independent survey of the claims-handling procedure was suggested to the Commission by the Medical Society representatives and this also was taken under advisement. The Commissioners agreed that the present fee schedule needs upward revision in many areas and Dr. Morris was instructed to begin working on this matter.

It was apparent to Dr. Beddingfield, Dr. Dameron and myself that the Commission is now headed by a man who certainly is much more open to the forward-minded thinking of the Medical Society and we trust that changes will be forthcoming in the not too distant future.

J.S. Mitchener, Jr., M.D., Chairman

INSURANCE INDUSTRY COMMITTEE COMPOSITION AND MEETINGS

15 physicians meet quarterly in various locations generally on a Wednesday for a 4 hour session.

The Committee meets in joint session with the Medical Relations Sub-committee of the N. C. Health Insurance Council (approx. 20 commercial insurance officials).

FUNCTIONS AND ACTIVITIES

1. Review of pertinent new legislation or developments in health fields which may relate to apyment of benefits to physicians.

2. Close liaison and interchange of information with commercial health insurance carriers.

3. Review and develop various health insurance claim forms.

4. This Committee is the official liaison committee with Part b Medicare carrier (presently Prudential).

5. Claim Review Service (CRS). This is the most active, time-consuming, and presently important function of the Committee. A "peer" review of controversial or unusual insurance claims is done in an open meeting. Review cases may be initiated by the patient, doctor, or the insurance carrier. Generally, the Committee is asked to determine the contractual liability of the insurance carrier in a specific case. This involves determination of a "usual and customary" fee, but in no way tends to "fix" or limit the doctor's charges. The case load of the CRS has gradually grown to as many as 5-6 cases for each meeting plus reconsideration of previous cases and discussion of many matters of policy.

COMMENTS OR SUGGESTIONS

Changes suggested would include; (1) addition of another GP and internist to the Committee; (2) deletion of one pediatrician; (3) earlier meeting times to permit adequate consideration of the increasing load. The Committee is anxious to seek and review cases initiated by doctors and would prefer closer liaison with the State Insurance Commissioner. It is hoped that the Insurance Commissioner may forward complaints or refer cases since the review is a two-way street in which the insurance carrier or the doctor may have legitimate complaints.

Thus far, there have been no known untoward reaction on the part of the CRS decisions as they are received by the medical profession. The doctors seem to have accepted the decisions gracefully.

CLAIMS REVIEW SERVICE COMMENTS

A few cases of apparent abuse or over utilization have been reviewed. However, these have been borderline cases where decision regarding quality control are difficult on the basic of the available medical information but it is felt that such review has benefited the patient, the sponsoring government program, and the attending physician.

Much over-utilization of hospital facilities is related to the severe shortage of adequate extended care facilities.

A. J. Dickerson, M.D., Chairman

COMMITTEE ON PROFESSIONAL INSURANCE

The Medical Society's Committee on Professional Insurance has met this past year, when appropriate, to consider malpractice claims and other Committee business. The timing for a review meeting has generally not been appropriate for the Committee to meet at the time of the Annual Committee Conclave. The Committee has acted as a clearing house for various inquiries concerning all types of professional insurance for physicians. This year the Committee considered a proposal from the Ralph Golden Agency for a "Daily In-Hospital Money Payment Plan" written by Kemper Insurance Group. The Committee

took positive action of approval and presented this action to the House of Delegates of the Medical Society which accepted the recommendations of the Committee. The Insurance Plan was approved and endorsed by the Medical Society for its physician members.

Over-all, the Committee has considered 59 malpractice cases this past year. Many of these were considered a second time because of certain developments in the cases within the course of time between meetings.

Very good rapport has been experienced between representatives of St. Paul and members of the Committee. Members of the Committee are to be thanked for their effort in achieving the purposes of this hard working Committee.

John C. Burwell, Jr., M.D., Chairman

COMMITTEE ON LEGISLATION

(Report not received as of 4/21/70)

COMMITTEE ON MARRIAGE COUNSELING AND FAMILY LIFE EDUCATION

The Committee met as a body during the Conclave at Mid Pines, September 25, 1969. Our discussions concerned possibly fruitful activity in four areas.

- A. How to interest and help North Carolina Physicians deal with family life problems.
- B. How to coordinate the work of our committee with that of the Governor's Committee on Family Living.
- C. How to coordinate our activities with those in the State's three medical schools.
- D. How to obtain the support of North Carolina physicians for improved family life and sex education programs in North Carolina Public Schools.

Pursuant to our discussion of Item A above, the chairman was instructed to communicate with every county medical society in the State offering our services in helping to provide speakers on topics in our area at county medical society meetings. This was done in January and so far we have had request from four societies for speakers. Two of these have already been scheduled and two more are in process.

The Committee has taken no action in areas B and C.

Noticing that there has been violent objection, mostly from ultraconservative elements, to the steps which have been taken to promote instruction in Sex Education and Family Living in the public schools, the committee chairman was instructed to offer our services, in any way in which they might be helpful to the State Superintendent of Public Instructions. This offer was made and received very warmly. So far we have not been called into action.

It was resolved that the State Society be asked to reaffirm support for improved family life and sex education in the schools and churches of the State.

Eleanor B. Easley, M.D., Chairman

COMMITTEE ON MATERNAL HEALTH

The Committee on Maternal Health has collected a total of 76 maternal deaths during 1969 which were reported through death certificates to the Bureau of Vital Statistics of the State Board of Health. Of this total 39 were white, 35 were colored and 2 were Indian. Table I lists the causes of death. There were 8 reported due to hemorrhage, 5 due to infection, 12 due to toxemia, 10 due to embolism, 9 due to cardiac failure and 14 were listed as due to other obstetrical causes. There were 18 classified as non-obstetrical. By comparison with the 1968 maternal deaths, it is noted that there were 3 more maternal deaths in 1969 -- there being 7 more white deaths and 5 less colored deaths and 1 more Indian death during 1969. It is noted that 59 of the total deaths occurred in the hospital, 7 were DOA on arrival at a hospital, 1 was DOA at a funeral home while 8 died at home and 1 on the highway.

The distribution of the causes of maternal deaths remains approximately the same with toxemia, embolism and hemorrhage as leading causes. It is of some interest to note that embolism seems to have increased considerably during the last 3 or 4 years as the cause of maternal deaths. Many of these deaths are documented by postmortum examination while other sudden deaths are categorized as embolism and are not so documented. The significance of this increase is not clear at this time. The category of other obstetrical causes of death included:

- 2 subarachnoid hemorrhage
- 2 hepatic failure due to hepatitis
- 2 sickle cell crisis
- 1 epileptic seizure
- 5 acute pneumonia
- 1 ruptured uterus following automobile accident
- 1 tuberculous pneumonia with hematogenous dissemination

It is of interest to note the number of respiratory infections which caused maternal deaths during 1969. This should call attention to the importance of prompt and adequate treatment to pregnant women with respiratory disease. The 76 deaths are currently being documented and analyzed. The distribution of maternal deaths by county is shown in Table II.

A series of articles on maternal deaths analyzed from 1946 through 1965 were completed and published in the North Carolina Medical Journal during 1969. The references are as follows:

Maternal Deaths from Hemorrhage in North Carolina, 1946-1965, N. C. Med. J., Vol. 30, January 1969

(See Table Next Page)

Table I
1969

	Total	White	Colored	Indian
Hemorrhage	8	3	4	1
Infection	5	3	2	
Toxemia	12	3	9	
Embolism	10	9	1	
Cardiac	9	6	3	
Anesthesia				
Other Ob	14	7	7	
Non-Ob	18	8	9	1
TOTAL	76	39	35	2

Maternal Deaths from Infection in North Carolina,
1946-1965, N. C. Med. J., Vol. 30, June 1969

North Carolina, 1946-1965, N. C. Med. J., Vol. 30,
September 1969

Table II

Maternal Deaths by County
1969

Alamance	1	Nash	1
Beaufort	1	Northampton	1
Buncombe	4	Orange	1
Burke	2	Pasquotank	1
Cabarrus	2	Pitt	1
CL			
Cleveland	1	Polk	1
Cumberland	5	Randolph	1
Davidson	1	Richmond	1
Durham	3	Robeson	4
Forsyth	9	Rockingham	2
Gaston	2	Rowan	1
Guilford	4	Sampson	1
Halifax	2	Scotland	2
Harnett	1	Stanley	1
Henderson	1	Surry	2
Hertford	1	Union	1
Iredell	1	Vance	2
McDowell	1	Wayne	4
Mecklenburg	4	Yancey	1
Montgomery	1		
		TOTAL	76

Reprints of this series of articles are available from the office of the Chairman of the Committee on Maternal Health to anyone who is interested in them. The Committee met several times early in the year, completing its plans for gathering data on therapeutic abortions through a report plan which was endorsed last year by the Executive Council of the Medical Society. The full Committee had its Annual Meeting on September 25, 1969, at Mid Pines. It is anticipated that a formal report on the therapeutic abortion survey will be made in the near future.

On behalf of the Committee on Maternal Health, I wish to express our appreciation to the Executive Council of the Medical Society of the State of North

Carolina for its support.

Attached is a copy of the financial statement for the year ending December 31, 1969.

COMMITTEE ON MATERNAL HEALTH
Statement of Receipts and Expenditures
January 1, 1969—December 31, 1969

Receipts for year 1969	\$3,746.52
Disbursements for year 1969	
Salaries	\$2,756.71
Equipment & Supplies	650.93
Travel & Meetings, Chairman	140.74
Balance December 31, 1969	3,548.38

W. Joseph May, M.D., Chairman

**COMMITTEE ON MEDICAL ASPECTS
OF SPORTS**

1969 was the first year that this committee functioned as a full committee under the State Medical Society, and a fair amount of progress was made during that year, with a greater degree of progress slated for 1970.

In March of 1969, I attended a meeting sponsored by Carl S. Blyth, Ph.D., Department of Physical Education, University of North Carolina, and Joseph Dewalt, M.D., University Physician at the University of North Carolina, at which time the football injury study was formally introduced. They had completed the first year of a two-year study program for this state. This was attended by many physicians, coaches and in addition, Mr. Cliff Fagan, Executive Secretary of the National Federation of State High School Athletic Associations, from Chicago, Illinois; Mr. William Murray, the Executive Secretary of the American Football Coaches Association, Durham, N.C.; and Daniel McLaurin, M.D., as representative of the State Medical Society's Executive Council. The highlight of that meeting was the announcement that this two-year project was a forward step in a documentation of the actual injuries that develop in 47 participating high schools throughout the State of North Carolina, and that the data from this study will be analyzed by a computer. The results will be published, and from these data, it will be possible to proceed and plan programs for modification and change where indicated, as per the deficiencies noted. This was a very time consuming study, and the participants, I feel, are to be complimented on their enthusiasm and method of study. This certainly will put a spotlight on sports medicine in the state of North Carolina, once this report is released in 1970.

I have served as a consultant to this group, and feel confident that the data obtained will be of

considerable benefit to both high school and college athletic programs in the future.

The annual meeting of the American College of Sports Medicine at the Regency Hyatt House in Atlanta in May was attended by the Committee Chairman, at which time many papers were reviewed, and new equipment exhibits were inspected. This afforded me the opportunity of getting a better look at the membership of this organization. I was impressed that it does have many non-medical personnel of a very high professional caliber on its rolls of membership. Their objectives are the same as ours, for the betterment of athletic programs and the care of the athlete.

In August, I attended a three-day meeting at the University of Rhode Island, which was the ninth annual meeting of the Medical Aspects of Sports Committee, and again was greatly impressed with the very fine program that was presented, and the informative subjects reviewed. It is my sincere hope that in the future we will have a similar meeting of this type available in this state, patterned after this pioneer work of Dr. Americo Savastano. In September, 1969, an attempt at a meeting at the Mid Pines Club in Southern Pines was quite disappointing, in that it was scheduled for and held on a Friday night during the football season, and this forced many members of the committee to cancel their attendance. A correction was made for this, for the year 1970, and the meeting will not be held on a football night, in order to promote greater attendance. As a result of that meeting, a request was made, and approved by the President of the Society, to extend the membership to Joseph L. Dewalt, M.D., University physician at Chapel Hill; Mr. Raymond K. Rhodes, Director of School Athletics and Activities, State Department of Public Instruction at Raleigh; and John T. King, M.D., Chief, Maternal and Child Health Section, Personal Health Division, State Board of Health. Other new members of the committee appointed after that meeting were Basil M. Boyd, Jr., M.D., Charlotte, N. C.; Walter J. Durr, M.D., Sylva, N. C.; James Chester Brewer, Jr., M.D., Guilford College, N. C.; and Marshall G. Morris, Jr., M.D., Greensboro, N. C.

The current project of the committee is the formulation of a Statement of Policy. Preliminary work on this was done at a meeting held at the Pines Restaurant, Chapel Hill, in early November, with a good number of members present.

At present, the Executive Council has requested this committee to formulate a generalized statement for the entire Society, based on the Committee's already formulated policy. A meeting was held on April 22, 1970, at the Pines Restaurant in Chapel Hill for this purpose.

In addition to the above named new members, the committee membership also includes Frank H. Bassett, III, M.D., Durham, N. C.; A. Tyson Jennette, M.D., Wilson, N. C.; F. Wayne Lee, M.D., Charlotte, N. C.; E. H. Stines, M.D., Canton, N. C.; Frank C.

Wilson, Jr., M.D., Chapel Hill, N. C.; and consultants Carl S. Blyth, Ph.D., Chapel Hill, N. C.; and Mr. David A. Harris, Jr., Athletic Director, Charlotte-Mecklenburg Public School System, Charlotte, N. C.

We feel that our first goal was to define the extent of the problem, and the second was to encourage involvement of the various appropriate Agencies in a cooperative approach to Drug Abuse. We urge each member of the Medical Society of the State of North Carolina to be cognizant of this problem and to endeavor locally to alleviate it.

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The current project of the committee is the formulation of a Statement of Policy. Preliminary work on this was done at a meeting held at the Pines Restaurant, Chapel Hill, in early November, with a good number of members present.

James R. Dineen, M.D.
Chairman

COMMITTEE ON MEDICAL EDUCATION

(Report not received as of 4/21/70)

MEDICAL-LEGAL COMMITTEE

Review of work done to date.

A meeting of the Medico-Legal Committee was held at Mid-Pines on September 24th, 1969.

Matters reviewed included the rising cost of professional liability insurance with possibility of cancellations by some companies and also withdrawal of carriers from the professional liability field.

The delay in the printing of the Inter-professional Code was discussed, it being pointed out that this delay was due to the fact that the N. C. Bar Association could not agree upon the final draft. An effort was to be made to obtain final approval so that printing could proceed. Dr. Ralph Conrad is currently working out the final draft of the Inter-professional Code with Mr. Marshall Spears, Chairman of the Medico-Legal Committee of the N. C. Bar Association.

The matter of compilation of proper legal forms for use in organ transplantation work was considered. Dr. L. L. Schurter was appointed as representative from the Medico-Legal Committee to formulate proper legal forms for use in organ transplantation.

Screening panels for malpractice cases was discussed and it was the consensus of the Committee that we should not pursue this any further at this time.

The North Carolina Bar Association, in conjunction with the three law schools of the State, sponsored an Institute on Basic Anatomy and Traumatic Medicine on February 27th and 28th, 1970, at the Institute of Government, Chapel Hill. More than 500 attorneys attended. The Chairman of the Medico-Legal Committee was asked to participate in the program, along with Dr. Eben Alexander of Winston Salem, and Dr. Arthur E. Davis, Jr., of Raleigh. It was felt that the program was well received and especially was it valuable in regard to educating attorneys as to fees for expert medical testimony.

Joint meetings were held in approximately thirty county societies during the year.

No instance of alleged unethical action on the part of physicians has been reported to the Committee.

Julius A. Howell, M.D., Chairman

COMMITTEE ON MEDICINE AND RELIGION

(Report not received as of 4/21/70)

COMMITTEE ON MENTAL HEALTH

The Mental Health Committee met in September and November 1969 and January 1970, and its full complement of fifteen members, Commissioner, Medical Society officers and staff were almost 100% present, indicating lively interest in the complex problems of a rapidly changing society for which we seem to have more questions than answers.

We reviewed the committee's previously stated purpose of working toward better mental health care through community based facilities and medical leadership and agreed this is still our goal.

The Sub-committee on Mental Health Education, Charles Vernon, Chairman, arranged a conference on

top echelon mental health educators from the three universities and the Department of Mental Health, planned a questionnaire about physicians' interests regarding mental health education, is advocating additional programs using psychiatrist-to-physician on-the-spot consultation and small-group discussion as the preferred methods of increasing the mental health know-how of non-psychiatric physicians; is planning to consider, with the new Medical Education Committee, the usefulness of a physician education coordinator within the Medical Society, and is recommending that the Department of Mental Health utilize the educational possibilities of the community mental health centers for local physician education. This sub-committee has collected a number of papers on psychiatric subjects to be published in the North Carolina Medical Journal, and it plans to work as closely with the new Medical Education Committee as with the Mental Health Committee itself.

The Sub-committee on Mental Retardation and Children's Services, Alanson Hinman, Chairman, has made plans to investigate the availability and the need for pre-natal care and other preventive and early treatment services for children in North Carolina. It plans to also report on the availability and the need of diagnostic and training facilities for the mentally retarded. It recommends Medical Society endorsement of Family Life Education in public schools. The Chairman and some of his associates have visited a school experimentally utilizing parents and volunteers in the one-to-one tutoring of slow learners (whether due to dyslexia, hyperactivity, short attention span, etc.) and will report on this as a possible method of increasing the available manpower for helping children in need.

The Sub-committee on Alcoholism, Donald Macdonald, Chairman, reviewed legislation regarding alcoholics and approved a bill providing for involuntary or court-ordered treatment for outpatients (involuntary treatment having previously been limited to inpatients). It approved a bill establishing the North Carolina Center for Alcohol Studies, and a bill to create an Advisory Council on Alcoholism to the State Board of Mental Health.

The sub-committee disapproved, as did the full Mental Health Committee, a law, G.S. 20-17.1, requiring all hospital administrators to report all patients with psychiatric diagnoses to the Department of Motor Vehicles. The Mental Health Committee's recommendation to the Council condemning this statute has been temporarily withheld by our Commissioner, John McCain, because the Department of Motor Vehicles, apparently recognizing the enormous implications of this law, has not acted to enforce it. Opposition to this particular law which involves all psychiatric patients and penalizes all persons seeking treatment does not indicate any diminution in the committee's concern about the menace of the drunken driver and its continuing efforts to study those particular dangerous people and to help the Department of Motor Vehicles remove them from the road.

The Ad Hoc Sub-committee on Suicide Prevention, Robert Garrard, Chairman, prepared a

statement "The Role of the Physician in Suicide Prevention," which was adopted by the Executive Council and has been distributed to all members of the Society. Dr. Garrard submitted a paper "The Role of the Physician in Suicide Prevention" to the North Carolina Medical Journal and this was published in January, 1970. The membership of this ad hoc committee was not listed in the July 1969 NCMJ and includes Thad Barringer, Charles Vernon, Carl Wellish, and Philip Nelson. The assignment of this ad hoc committee is completed.

The Mental Health Committee has established liaison with other committees on mutual problems. The Mental Health Committee is working with the Committee on Chronic Illness in regard to the development of facilities for the aged patient with chronic brain syndrome. Further communication is planned with the Committee on Maternal Health regarding psychiatric indications for abortion, although it appears that the courts may soon put this entirely in the hands of the individual physician and his patient.

Communication is maintained with the AMA Department of Mental Health, and the chairman will attend the annual meeting of the Mental Health Chairmen in Chicago. That meeting will concern itself with mental health care of the poor. Some work has been begun with the Insurance Industry Committee on efforts to simplify and clarify mental health coverage in health insurance policies by encouraging coverage for psychiatric treatment, in specified amounts, rather than for particular diagnoses (which may be difficult to agree upon) or particular etiologies (which may be impossible to agree upon) just as surgical policies pay for specified surgical treatments rather than for specified diagnoses or causes.

The Committee, at the request of President Beddingfield, is following closely the Department of Mental Health's revision of the Mental Health Code (statutes). The Committee has begun examining the problem of discrimination in employment of the former mental patient and the mentally handicapped or partially mentally disabled. We are considering the advisability of a public statement by the Society on the dangers of so-called sensitivity training and various group oriented emotional experiments without adequate professional supervision. We think that a Mental Health Committee should somehow be of assistance to the Department of Corrections in changing the prison and punishment system into a true correctional and re-educative system, but that job looks so big and the conditions are so appalling that we don't know where to start on that one.

The Mental Health Committee, its various members, and its so-called "Sub-committees", which are actually complete presidentially appointed committees themselves, have many more interests and hopes than they can likely accomplish in any short time.

Paul G. Donner, M.D., Chairman

SUBCOMMITTEE ON MENTAL HEALTH EDUCATION

I. QUAIL ROOST CONFERENCE: The highlight of the subcommittee's activities this past year was the Quail Roost Conference held February 28-March 2. At this snow bound exercise were representatives from throughout the state who have a stake in psychiatric education for physicians. The conclusions of the proceedings of this conference are herewith summarized.

First and foremost it was concluded a clearer idea of physician need and motivation for psychiatric education should be obtained from the physicians themselves. A questionnaire was recommended as a first step toward quantifying this and such an instrument is planned after preliminary feasibility investigation with the North Carolina Regional Medical Program (Harvey Smith, PH.D.) and the State Medical Society's new Committee on Medical Education (Daniel A. McLaurin, M.D., Chairman).

Secondly, with respect to teaching methods, physician consultation was regarded by participants as the choice means of training physicians in psychiatry. Such consultation must be personal and on-the-spot in hospitals or doctor's office. The other method advocated by many psychiatrist-teachers in N-PP education is the use of repeated regular sessions of group discussion. It may be that individual consultation and group discussion are complimentary educational methods especially suited to the subject matter of psychiatry as applied to the clinical practice of medicine. Participants agree unanimously that in particular, more support should be given to the expansion, extension, and coordination of physician consultation programs throughout North Carolina. (James A. Cathell, M.D., Hans Lowenback, M.D., Donald Robert Fowler, M.D., and others).

Thirdly, with respect to organization and implementation of postgraduate education, central coordination was discussed. To plan and maintain programs, continuity and persistence of effort are needed by the establishment of an office for these activities with a coordinator-manager. Feasibility for the existence of such an office should first be considered and planned through the new committee on Medical Education of the State Medical Society.

Finally, to further effective physician involvement in mental health the State Department of Mental Health should continue, and place priority on, the development of physician education as a role in the community mental health centers, centers for the mentally retarded and mental hospitals.

II. SPECIAL JOURNAL:

Articles for a special issue of the North Carolina Medical Journal have now been accumulated. These cover a wide range of psychiatric subjects written by N. C. physicians about N. C. Psychiatry. It is now planned to publish this series of articles in the regular journal as each can be accepted and then perhaps later form a special issue.

III. PLANS:

As the Medical Society defines and develops its involvement in Medical Education through its new

Committee on Education this committee will establish new goals for itself. Its membership will continue to watch over mental health education activities throughout the state and function in post graduate psychiatric education for the non-psychiatrist physician.

C. Vernon, M.D.
Chairman

attendance at the meeting that was held, difficulty in finding time for additional meetings, and the continuing intrusion of primary professional responsibilities on this voluntary job. Solid accomplishments, therefore, are not very obvious, but ongoing thinking and planning efforts have been kept very much alive.

Alanson Hinman, M.D., Chairman

SUB-COMMITTEE ON MENTAL RETARDATION AND CHILDREN'S SERVICES

This Sub-Committee had a meeting at Raleigh, North Carolina on October 28, 1969.

The primary focus of that meeting was the need for the Medical Society to investigate the present status of the preventive services in current federal and state programs for child health and welfare and encourage development and expansion of weak or non-existent services and facilities.

There is need for Medical Society endorsement and encouragement of inclusion of Family Life Education in public school curricula, in spite of the objections of the Edgecombe-Nash County Medical Society. Opposition of reactionaries should not be a reason to avoid education of parents-to-be in the basic concepts of adjustment to family living and adaptation to society.

The Sub-Committee discussed the problem of provision of adequate prenatal care but this discussion fell into the usual morass of inadequate professional and sub-professional personnel, non-acceptability of current concepts of public clinics, poor distribution of health manpower, etc.

In a subsequent meeting of the Mental Health Committee, the chairman of the Sub-Committee on Mental Retardation and Children's Services was asked to develop a statement on the size and scope of the problem of mental retardation and associated developmental disorders in North Carolina. Unfortunately, shortage of time and other responsibilities have prevented the writing of this document.

Dr. Robert Cohen, Deputy Director for Mental Retardation, North Carolina State Board of Mental Health has recently written a paper on mental retardation and the services and facilities for these individuals and their families that will be published in the near future in the Journal of the Medical Society of North Carolina.

The chairman of the Sub-Committee is also chairman of the Committee on the Handicapped Child of the North Carolina Chapter, American Academy of Pediatrics and attended the national committee meeting in October, 1969 in Chicago.

The discussion at that meeting was primarily focused on expansion of existing Crippled Children's Program in the 50 states, exploration of ways to get additional chronically handicapping conditions authorized for coverage and methods of making clinics more available and utilizable.

In summary, the Sub-Committee has suffered from the usual and expectable problems of poor

SUBCOMMITTEE ON ALCOHOLISM

The Subcommittee on Alcoholism met on March 25, 1969, and again on October 30, 1969. Both meetings were devoted largely to the consideration of pending legislation affecting the alcoholic. Note was taken of the drafting of a bill to be presented to the 1969 Legislature to provide for the involuntary treatment of mental illness or alcoholism on a local outpatient basis. The Committee also viewed with favor the bill to provide for a North Carolina Center for Alcohol studies. A further act to create an Advisory Council on Alcoholism to the State Board of Mental Health was also approved by the Committee.

Dr. Walter Wolman of the A.M.A. Department of Mental Health wrote to the Committee Chairman about members of his staff attending certain of the committee meetings and it was agreed that the Committee on Alcoholism would be glad to meet with Dr. Wolman or any member of his staff, possibly in a joint meeting with the Committee on Mental Health.

One of the major topics considered by the Subcommittee was the fact that Section 20-17.1 of the General Statutes of North Carolina requires hospitals to report the admission of alcoholic and mental patients. As amended by the 1969 General Assembly, a review system was established whereby the Department of Motor Vehicles determines if such a person is competent to operate a motor vehicle with safety. There was considerable discussion within the Committee about the problems of this law and how it affected the alcoholic or mentally ill individual who sought treatment. The following motion was passed by the Subcommittee to be reported to the parent Mental Health Committee:

The Subcommittee on Alcoholism is concerned about the importance of GS20-17.1 which requires the reporting of names of persons to the Department of Motor Vehicles who are admitted to inpatient medical facilities who are allegedly mentally ill or alcoholic. The Committee regards this to be unfair to any patient seeking medical treatment. It is acknowledged that the sooner these patients receive treatment the greater the probability of recovery and the sooner they will return to productive living. Through public education programs people with emotional and drinking problems have been encouraged to seek treatment on a local basis. The Committee feels this reporting requirement would be a deterrent

and obstacle for each individual seeking treatment.

A proposed study of drunk driving offenders was discussed and the Committee members waited with interest for further information on this topic.

The question of the relationship on alcoholism programs to the increasing problems of drug abuse in our society was raised and it was agreed that a communication be directed to the Committee on Drug Abuse to express the alcoholism committee's interest in their work and eagerness to work with them and to cooperate with any of the activities of that committee.

D.E. Macdonald, M.D., Chairman

AD HOC COMMITTEE ON SUICIDE PREVENTION

The Ad Hoc Committee on Suicide Prevention prepared a statement "The Role of the Physician in Suicide Prevention", which was adopted by the Executive Council on May 17, 1969, and has been distributed to all members of the Society.

Dr. Robert L. Garrad, Chairman of the Ad Hoc Committee, submitted a paper, "The Role of the Physician in Suicide Prevention" to the North Carolina Medical Journal, which was published in the January, 1970 issue.

The assignment for this Ad Hoc Committee has been completed.

Robert L. Garrad, M.D., Chairman
Greensboro, N. C.
Thad J. Barringer, MD.
Raleigh, North Carolina
Charles R. Vernon, M.D.
Wilmington, North Carolina
Carl S. Wellish, M.D.
Jacksonville, North Carolina
Philip G. Nelson
Greenville, North Carolina

COMMITTEE ADVISORY TO THE DEPARTMENT OF MOTOR VEHICLES

The committee met during the Fall Conclave. There were reports by Mr. William Melvin of the Attorney General's Office concerning new legislation and by Dr. William DeMaria concerning the progress of the Driver License Research Center and Clinic.

During this meeting two questions were asked: (1) What are the legal implications with respect to the hospital and doctor of withdrawal of blood, by the doctor or representatives of the hospital or doctor, from a driver brought to them by a law enforcement officer for blood alcohol determination? (A subcommittee consisting of Drs. John T. Cuttino, Chairman, Allen B. Coggeshall, and James F. Newsome, was appointed to look into this problem), and (2) The question of whether the Appeal Board needed the support of the Medical Society in getting expansion. (Dr. Charles Wilkerson, Chairman of the

Appeal Board has been asked this question, but has not replied).

During the year the committee has been quite active in its efforts to establish the Research Center and Clinic. Plans for the Duke University Medical School to administer the unit have been finalized. Land in the Research Triangle has been acquired, announcement of the plans of the unit to the public by the Governor has been accomplished, and the initial plans, contacts, etc., for fund raising, have been made.

Mr. William Melvin and the Chairman have prepared a paper for the Journal concerning interpretation of traffic safety legislation as it relates to the members of the Medical Society.

Jesse H. Meredith, M.D., Chairman

COMMITTEE ON NECROLOGY

The Committee on Necrology will report at the opening session of the House of Delegates on May 17, 1970 during the Memorial Services.

W. Otis Duck, M.D., Chairman
Dan S. Currie, Jr., M.D., Vice-Chairman

COMMITTEE ON NOMINATIONS

The Committee on Nominations met on March 8, 1970. The Committee will furnish to the President a sealed report at least two weeks prior to the meeting of the House of Delegates, May 17, 1970.

This sealed report will be opened by the President at the First Meeting of the House of Delegates, Sunday, May 17, 1970, 2:00 p.m., Cardinal Ballroom, The Carolina, Pinehurst, North Carolina, in accordance with the provisions of the Constitution & By-Laws, Chapter V, Section 2 and Chapter X, Section 4.

Bruce B. Blackmon, M.D., Chairman

COMMITTEE OF PHYSICIANS ON NURSING

The Committee of Physicians on Nursing had three meetings during the past year, with another one scheduled for May 15, 1970.

In the meeting on April 30, 1969, many matters concerning nursing education in North Carolina were considered, including the action taken by the Legislature of North Carolina, regarding bills relative to nursing and public health in North Carolina.

Many bills of interest and considered seriously by the Committee of Physicians on Nursing, were brought to the attention of the Committee by Senator W. D. James, a representative in the Senate of North Carolina.

One of the bills considered, related to an appropriation of \$200 for each Student Nurse in North Carolina schools. This bill came up, as a result

of the activities of the Committee of Physicians on Nursing.

Another bill, which would have provided \$200 in addition, came up later. Just what happened to this bill, is not clear.

Most of the bills that were brought up, failed to pass on account of the opposition of the representatives or the State Nursing Association.

On the whole, there was unmistakable evidence that Senator James had the interest of the nursing profession at heart, and tried valiantly to bring this matter before our Legislative group in Raleigh.

The two matters, which were given greatest consideration of the Committee of Physicians on Nursing, during the past year, were a proposition of an Academy of Nursing, and a program to give recognition to the nursing profession in the State of North Carolina.

The first suggestion for an Academy of Nursing was suggested by Dr. John Bennett, a member of the Committee of Physicians on Nursing. The things that stimulated this probably was the shortage of nurses in North Carolina and the Nation, and the need for up-grading of education in the hospital schools of Nursing. The fact that many of the diploma schools of Nursing were closing, threatened an even greater shortage of nurses as time went on, and there was little hope that the diploma schools of Nursing two-year course would fill the gap and make up for the shortage in the foreseeable future.

The concept of the ACADEMY OF NURSING, was a three-year course of training, centered around the community hospitals with a State provided instructional program in Basic Sciences and Specialities. It, also, took care of further study leading to further advancements in Nursing and to degrees in Nursing. This plan is very clear, reasonable, and appeals very much to the Committee.

Dr. John Bridgers of High Point, a member of our Committee, also, had a part in making suggestions and improving the plan.

The Committee has clear-cut plans already drawn up for each period of study in this program, and will be glad to furnish copies to anyone interested in this matter. It was first presented and given thorough consideration in the meeting of the Committee of Physicians on Nursing in February 1969.

In a meeting on Friday, September 26, at Southern Pines, further consideration of this bill and discussion was had, and it was suggested that representatives of the nursing profession of North Carolina be invited to a meeting, and present their views on the matter of an ACADEMY OF NURSING. They had previously been supplied with a copy of the plans to be studied before the meeting.

On January 30, 1970, a meeting was arranged with the leaders of the North Carolina Nurses Association, at The Carolina, Pinehurst. In addition to certain members of the Committee, Helen E. Peeler, of the North Carolina State Nursing Association, Mrs. Mary Edith Rogers, President of the N.C.S.N.A., Mrs. Vera Smith of Charlotte, and Miss Mary McRee of the N.C. Board of Nursing were present.

Quite a spirited discussion was had, concerning the merits of an ACADEMY OF NURSING, as well as, the disadvantages. No definite conclusions were reached, and a further meeting was scheduled for February 27, 1970, at the Holiday Inn, Burlington.

At this meeting, several members of the Committee of Physicians on Nursing, and additional members, and leaders in nursing education in North Carolina were present. Six or eight nurses were present. Further discussion was carried out. The discussions were led by Dr. Bennett. Multi-faceted discussions on the concept of an ACADEMY OF NURSING, were heated at times, but, always, in good humor.

The matter of FRAGMENTATION in the nursing field, failing of diploma schools, lack of funds, and so on were discussed. The need for a co-ordinated approach on the part of the medical profession, nursing profession, and hospital profession, was stressed.

It was the feeling of the nurses, however, that the three programs of Nursing, each fulfills a definite need and each one focuses on the use of the community hospitals.

Much discussion on what Nursing really is, and what it means, was carried out.

Again, there were no definite conclusions reached concerning the concept of an ACADEMY OF NURSING.

Before progressing further the consideration for implementation of a plan, it was decided to call another meeting of the same groups for May 15, at the Holiday Inn, Burlington.

During this time, copies of the report of the National Commission for the Study of Nursing and Nursing Education, was to be requested for each member of the Committee and the Nurses.

The second matter for consideration by the Committee at the September 26 meeting was a matter of needed improvement in education of allied health personnel.

MOTION: That the Committee adopt the resolution read by Dr. McCain for improvement in education of allied health personnel.

This motion was passed unanimously.

A third matter, which had been given consideration by the Committee of Physicians of Nursing for the past two years, was the matter of RECOGNITION OF NURSING WEEK in North Carolina. Plans were drawn up by Dr. John Bridgers, a member of the Committee of High Point. The week of May 12 has been declared NURSE RECOGNITION WEEK in North Carolina and was passed by the Legislature.

Accordingly, the matter of NURSE RECOGNITION WEEK was brought to the attention of the President of each county Medical Society in North Carolina, who was asked to appoint a Chairman and a Committee to consider NURSE RECOGNITION WEEK and to choose from the nurses of each county a NURSE OF THE YEAR. This nurse was to be honored and considered among

others who were represented for NURSE OF THE YEAR. The winner would be presented at the Annual Meeting of the Medical Society of the State of North Carolina, May 20, 1970, at The Carolina, Pinehurst, North Carolina.

The matter of publicity, through newspapers, T.V., and civic organizations, was outlined.

Guidelines for selection of the NURSE OF THE YEAR were sent to the President of each County Medical Society to be presented to the nurses who wished to apply. A NURSE OF THE YEAR would be presented at the State Medical Society Meeting. She would be selected by a special committee after credentials were considered.

The matter of the ACADEMY OF NURSING, the motion concerning the EDUCATION OF THE ALLIED HEALTH PERSONNEL, and the program for the NURSE RECOGNITION DAY have all been approved by the Committee and by the Executive Council of the State Medical Society.

Finally, the Committee has had a very busy year and as indicated has had plenty of important matters to consider. Much time and attention has been given by the different members of the Committee, and for this I am deeply appreciative.

Fred C. Hubbard, M.D., Chairman

COMMITTEE ON OCCUPATIONAL HEALTH

During the year 1969-70, the Committee on Occupational Health of the Medical Society of the State of North Carolina has directed its interest in four major areas. These are:

- (1) Endorsement and support of State legislation proposed to bring North Carolina a comprehensive program for assuring safe and healthful working conditions, such legislation being at least equal to the federal regulations established under H.R. 133373.
- (2) Feasibility review of the development of industrial clinic organizations to provide for smaller industrial units.
- (3) Preparation and proposal of a policy statement for the Medical Society of the State of North Carolina concerning Occupational Health.
- (4) Directing efforts toward increasing the interest of physicians throughout the State in the health and safety aspects of employment. Of special interest has been the concern, action, and reaction to efforts to improve the situation of workers in the cotton-fiber industry.

Conjoint meetings have been held with the School of Public Health of the University of North Carolina and the Department of Public Health of the State of North Carolina. Much assistance has been given to the Committee in all of its areas of concern by these two groups.

Discussion of expansion of the Committee membership and of the interests of the Committee to

include the broader field of environmental health has been held. Acceptance of this increase in the area of the Committee's concern has been made, contingent upon the desires of the Medical Society of the State of North Carolina.

COMMITTEE ON CHAMPUS

The Civilian Health and Medical Programs of the Uniformed Services (CHAMPUS) operated on an expanded basis during 1969 as evidenced by a comparison of the number of physicians' claims and amounts paid during the years 1968 and 1969, respectively. This increase was due to the expanded scope of the program for active duty dependents and a program of inpatient and outpatient civilian health care effective January 1, 1967 for retired military families and the dependents of former service members who died while on active duty or in a retired status.

The Annual Report of the Fiscal Agency-North Carolina Blue Cross and Blue Shield, Inc. is attached and incorporated as a part of the Committee Report. This report shows comparative statistics for the past two years and indicates that during the past thirteen years a total of \$33,815,034 has been paid to North Carolina physicians and hospitals and other providers of care-a significant factor in support of free choice of community hospitals and physicians.

Beginning with services provided on and after February 1, 1968, the program has been administered on a usual, customary, and reasonable fee basis under the contract between North Carolina Blue Cross and Blue Shield, Inc. and the Office of the Civilian Health and Medical Program of the Uniformed Services. By previous action and on recommendation of our Committee, the Council has endorsed Blue Shield as the continuing fiscal intermediary and authorized our Committee to provide supervision for adjudication of claims and to give advice and counsel in other professional matters as requested by Blue Shield. Therefore, a claims review sub-committee composed of seven physicians of representative specialties was appointed to work with Blue Shield for establishment of criteria and patterns of maximum reimbursements.

The Committee and claims review sub-committee have held meetings as needed and the chairman and members have consulted with one another by phone and letters frequently. Thus cases of an unusual and complex nature were considered individually to the mutual satisfaction of those concerned.

The usual, customary, and reasonable concept as administered under and the CHAMPUS has been widely accepted by North Carolina physicians there have been few complaints. However, physicians not desiring to accept assignment, or not desiring to be subject to maximum reasonable allowance determination, are privileged to bill the patient direct. In such cases, Blue Shield is authorized to reimburse the patient in an amount not to exceed that which would have been paid the physician.

The customary and reasonable concept is a growing one and pertains to major medical,

commercial coverages, Blue Shield and is a factor in Medicare and Medicaid. Therefore, the Committee believes that the North Carolina Medical Society will benefit from our continued relationship with this program. We will endeavor to see to it that the program continues to operate on the highest possible level of professional standards and we will see that the members of the Society are kept fully informed.

Mr. K. G. Beeston, Vice President of North Carolina Blue Cross and Blue Shield, Mr. M. A. Campbell, CHAMPUS Department Manager, and his staff have continued to give excellent cooperation and administration. The counsel and activities of Mr. William N. Hilliard and Mr. James T. Barnes and the staff at the headquarters office of the Medical Society have been invaluable.

D. M. Cogdell, M.D., Chairman

DELEGATES TO AMA

AMA Annual Convention-July 13-17, 1969 Americana Hotel, New York City, New York, See NCMJ, Vol. 30, No. 8, August 1969, p-331.

AMA Clinical Convention-November 30-December 4, 1969 Denver, Colorado. See NCMJ, Vol 31, No. 1, January 1970, p-26.

COMMITTEE LIAISON TO NORTH CAROLINA PHARMACY ASSOCIATION

The following report is submitted as to the activities of the Committee Liaison to North Carolina Pharmacy Association during the past year. This committee met on Thursday, September 25, 1969 at 9:00 a.m. at the meeting house of Mid Pines Club, Southern Pines, North Carolina.

Several communications have been received from the State Headquarters by the chairman of this committee, which have been read and studied; but they did not require any action necessary to call the committee to meet. Therefore, the meeting on September 25, 1969 is the only meeting that this committee has had during the past year.

Charles W. Byrd, M.D., Chairman

PHYSICAL & VOCATIONAL REHABILITATION (Report not received April 21, 1970.)

COMMITTEE ON PUBLIC RELATIONS

The Annual Meeting of the Committee on Public Relations was held Thursday, September 25, 1969, at Mid Pines. The following actions were taken:

1. Approved continuation of THE PUBLIC RELATIONS BULLETIN in its present formal format.

2. Approved that for the 1970 N. C. State Fair, because of increased cost due to the Fair increasing its operation from six to nine days and because of difficulty in obtaining enough personnel to man the booths, the Headquarters Staff be requested to explore the possibility of using two booth spaces instead of four and elimination of the blood typing service heretofore offered. It was recommended that an educational display be continued at the Fair.
3. Recommended continuation of the High School Science Fair Project at a total estimated expense of \$250.00 with the winner of the exhibit being invited to present his or her exhibit at the annual State Medical Society meeting in May with expenses paid and the expenses of one parent or teacher chaperone to be paid by the Society.
4. Recommended that the Committee continue its present policy and renew "TODAY'S HEALTH" magazine subscriptions to the Governor, Council of State, Supreme & Superior Court Judges, and members of the North Carolina General Assembly. It was further recommended that the policy of sending gift subscriptions of "TODAY'S HEALTH" to all colleges in the State of North Carolina be continued and in addition, free subscriptions be sent all community colleges.
5. Approved the continuation of support of North Carolina Rescue Squad First-Air competition by furnishing trophies at the Annual Convention of the North Carolina Association of Rescue Squads.
6. Voted to give the Chairman of the Committee and Mr. Hilliard the privilege and responsibility of getting speakers for the entire program for the 1970 Conference of County Medical Society Officers and Committeemen, with the suggestion that the Friday evening and Saturday programs be similar to those in recent years.
7. Recommended that the Headquarters Staff undertake to negotiate with the AMA for faculty for the Speech Training Course in 1970.
8. Recommended that the Governor's office be requested to issue a statement declaring October 19-25, 1969, as Community Health Week. It was recommended that the Headquarters Staff make a statewide press release concerning the observance.
9. Endorsed making the film "THE APPEAL OF MEDICINE" available to as many civic clubs, schools, and other groups interested in health career promotion as possible. The Committee

was apprised of the fact that there is a video-tape version of the film available for commercial television programs. Members of the Committee were asked to contact television stations wherever possible and determine their interest in showing this tape.

10. Recommended and requested Executive Council approval that each junior and senior medical student enrolled in medical schools in North Carolina be invited by personal letter to become a member of the Medical Society of the State of North Carolina.

On September 27, 1969, the Chairman attended the banquet of the Annual Convention of the North Carolina Association of Rescue Squads held in Hickory, North Carolina, and as the official representative of the Medical Society of the State of North Carolina presented trophies to the winning First-Aid teams. Approximately 400 persons were in attendance at the banquet. Three trophies were presented and the state championship was won by Moore County +2 Rescue Squad. It is appropriate to note that the Chairman read to the Convention a letter expressing admiration and appreciation from our President, Dr. E. T. Beddingfield, Jr., and that this letter was applauded as warmly as was a telegram to the Convention from the Governor.

On November 5 and 6 a Speech Training Program was held at the Sheraton Inn in Winston-Salem. It was a very excellent course with twenty-three persons enrolled. The faculty was headed by Mr. Mortimer T. Enright, Director of The Speaker's Program of The American Medical Association. Other members of the faculty were: Dr. Robert A. Lang, Executive Secretary of the Academy of Medicine of Greater Cleveland; and Stephen T. May, PhD. of the School of Speech of Northwestern University. These men did a very excellent job. All those enrolled in the program were sent a questionnaire a few weeks after the program and, without exception, all praised the program very highly. The Committee would be remiss if it did not gratefully acknowledge the kindness of Mr. Howard Hall, Director of Development, Bowman Gray School of Medicine, Winston-Salem, North Carolina, for providing video-tape equipment and personnel proficient in its operation for the course.

On January 30 and 31, 1970, the Annual Conference of County Medical Society Officers and Committeemen was held at the Carolina Hotel at Pinehurst. The theme for the Conference was "The Changing Health Care Delivery System". One hundred nine physicians were registered for the Conference. Appropriate talks on Medicaid were delivered by Mr. Emmett L. Sellers, Director of Medical Services Division, North Carolina Department of Social Services; Mr. J. Alexander McMahon, President, N. C. Blue-Cross-Blue Shield, Inc., which organization administers Title XIX in North Carolina; and by Mr. Harry S. Colby, Consultant with John B. Joynt & Associates, Denver, Colorado.

A talk concerning the physicians' assistance educational program at Duke was given by E. Harvey Estes, M.D., Professor and Chairman of Department

of Community Health Services, Duke University Medical Center; and Ernest W. Ferguson, M.D., of Plymouth, North Carolina, told of his experience in his practice using one of the physician's assistants trained at Duke. As in previous years, workshops were held for medical societies divided into three groups according to the number of members. Panelists for these workshops were members of the State Medical Society augmented by David W. Powers, LLD, Director of the AMA Department of Field Service, and Mr. J. Tom Sawyer from Atlanta who is the AMA Field Service Representative for North Carolina. A critique on the workshops was presented to the entire assembly. John R. Kernodle, M.D., former State Society President, who is now on the AMA Board of Trustees, spoke on "Avenues to AMA" which supplemented the after dinner speech which he had given Friday night on "Activities of AMA". George W. Paschal, M.D., Past President of the State Medical Society, spoke on the activities of the State Society; and James E. Davis, M.D., Speaker of the House of Delegates of the State Society, told of the operations of this body. Mrs. Nell Sowers, Owner-Instructor, Salisbury Business College, gave a most interesting talk on "Impressions-First and Lasting". Her talk was very informative and very revealing as to some of the thoughts lay people have about physicians. John H. Budd, M.D., AMA Delegate from Cleveland, Ohio, told of possible future "systems" for dispensing medical care; and Mr. David Powers related some of his interesting experiences in endeavoring to accomplish things through the AMA which would be beneficial to physicians. The Conference concluded with some remarks from Dr. Beddingfield in which he urged the importance of having an open mind to the "new" ideas and practices with which we will be faced in the future in delivering health care.

This was my first year as Chairman of this Committee. I have been very impressed with the large number of activities with which the Committee is involved. I think this is a reflection of the good work done by my predecessor, Dr. Philip Naumoff, who was Chairman of this Committee for eight years. At the same time, I must acknowledge the excellent job done by the Headquarters Staff. I feel that whatever has been accomplished by this Committee in the past year should be credited to the groundwork laid by Dr. Naumoff and to the efforts of our loyal, imaginative, and hard working Headquarters Staff.

Sherwood W. Barefoot, M.D., Chairman

COMMITTEE ON RELATIVE VALUE STUDY

The Committee on Relative Value Study had a very busy and productive year. Because of the new California Relative Value Schedule, there were many proposed changes in virtually every aspect of the old Relative Value Schedule.

The first committee meeting was held at Mid Pines on September 27, 1969. The prototype copy of the new California Relative Value Schedule was

thoroughly examined and discussed. Because of the many changes incorporated, it was agreed that no action would be taken at this time because of the importance of thorough understanding of every aspect of the change. Obvious discrepancies were discussed in the current North Carolina Relative Value Study and various departments, including cardiac surgery, dermatology, surgery, internal medicine and obstetrics and gynecology were discussed. After appropriate action was taken the meeting was adjourned.

On the recommendations of the Executive Council of the Medical Society of the State of North Carolina, the chairman attended the Relative Value Study Educational Program Seminar in Los Angeles, California on October 25, 1969. Ken Beeston, representing Blue Cross/Blue Shield and Bill Hilliard, representing the Executive Office of the Medical Society of the State of North Carolina also attended. The meeting was a day long workshop with excellent presentation of the new concepts and changes in the 1969 California Relative Value Study. The meeting was most informative and certainly was worthwhile attending.

A special meeting of the Committee on Relative Value Study was held at Rex Hospital on December 20, 1969. This meeting was held specifically to discuss the 1969 California Relative Study. After a very thorough and productive discussion of all points, the Committee voted to recommend the adoption of the five digit coding system to replace the current four digit coding system. The California Relative Value Schedule. The decision to accept the modifiers was delayed because of the requirement of further information concerning this most important problem. Other routine business was transacted and appropriate correspondence was mailed.

The chairman also attended the November 12 Blue Shield Committee meeting of the Medical Society of the State of North Carolina and submitted a report on the new California Relative Value Schedule.

Arthur E. Davis, Jr., M.D., Chairman

RETIREMENT SAVINGS PLAN COMMITTEE

The Retirement Savings Plan Committee is pleased to present its annual report for compilation in the record. During the year Dr. William F. Hollister was elected to the Committee by the House of Delegates in Pinehurst to replace Dr. John R. Kernodle who resigned after becoming a trustee of the AMA and, consequently, a member of its Retirement Savings Committee. Also, the Committee, as well as the Society, was greatly saddened by the death of Dr. Elias Faison who has served this Committee and the Society over so many years.

Because of the nature of the Committee's business no meeting was held at the conclave in Mid Pines in September. However, in 1970 a Committee meeting will be held at that time and as often as necessary in the interim.

In October 1969 the Committee arranged for information to be sent to each member of the Society. This information included a new revised and shorter brochure describing the North Carolina Medical Retirement Savings Plan. Also accompanying this brochure was an explanatory letter from the chairman and a business reply card in case a member desired additional information concerning the Retirement Savings Plan. Response to this distribution was excellent and a number of physicians and their employees came under the Keogh Plan for retirement purposes as a result. The Committee and the Trustee (Wachovia Bank & Trust Company) is planning to distribute a similar batch of material in the fall.

The total number of participants in the Plan as of the last day of December 1969 was 290. At that time the total assets of the Stock Fund was \$1,017,868.91.

Participants contributed \$361,794.72 during the year of 1969 and the amount of dividend and interest income received on the portfolio holdings during 1969 amounted to \$22,233.38. During this time the trustees were paid \$4,068.58 out of the fund. There was no other expense.

During the year there were a number of withdrawals and payments made from the Plan. The withdrawals consisted of switching from our Plan to some other plan. This amounted to \$75,642.09. Payments on death of participants amounted to \$14,148.06, disability \$891.57 and paid because of employees termination of employment \$1,701.19. There was no payment due to retirement. During the year there were transferred from the North Carolina Medical Retirement Savings Plan to Wachovia's general Keogh Plan the amount of \$127,126.01. This latter transfer was thought to be due to the more speculative aspects of the Wachovia general plan which appealed to a number of participants, although the costs in the latter plan are greater.

The Retirement Savings Plan Committee held a meeting in the trust offices of Wachovia Bank & Trust Company in Winston-Salem, North Carolina, on February 5, 1970. At that time reports were heard from various officers of the trust department on activity during the year. Several interesting and pertinent items were brought to attention:

- (1) The effect of professional corporations on the Keogh plan idea.
- (2) It was pointed out that during 1969 the Stock Fund was ruled as being a "pooled fund" by Federal authorities after Wachovia had become a national association institution rather than a state bank. Consequently, it will be necessary for the Plan to be audited each year by an outside auditor. This will add some expense to the operation of the Plan which was not foreseen when the original agreements were made. Previously, an outside audit could be ordered at any time by the Committee.
- (3) The trustee indicated its intention to maintain a booth at the annual convention. Arrangements were made to communicate

more with the members that Wachovia was actually the trustee of the Society's Retirement Savings Program.

- (4) Arrangements were made to contact new members of the Society and provide them with information about the Plan.

At the meeting it was pointed out that those holding stock equities during 1969 suffered some depreciation in many of their holdings. However, Washovia reported that the North Carolina Medical Retirement Savings Plan Stock Fund held up better than any of the other plans administered by Wachovia.

Jesse Caldwell, M.D., Chairman

COMMITTEE ON SOCIAL SERVICE PROGRAMS

The Committee on Social Service Programs supplanting the committee of Liaison to the Department of Public Welfare and including work of the Task Force Title XIX Committee (including Medicaid), met on September 25, 1969, at Southern Pines, North Carolina.

Members present included Bruce B. Blackmon, M.D., John E. Dixon, M.D., Donald McC. Ross, M.D., D. A. McLaurin, M.D., Alanson Hinman, M.D., R.L. Sith, M.D., Emery Rann, M.D., Leslie Morris, M.D., Frank C. Griess, Jr., M.D., J. R. Kernodle, M.D., George W. Paschal, M.D., and John Glasson, M.D.

The Committee took note of recent developments in the Medicare Program, and in noting communications from Mr. Douglas Richard, of the Atlanta office of the Department of Health, Education and Welfare, objected to the regulations particularly with respect to payment of professional fees in teaching hospitals in the forthcoming implementation of Title XIX in the State of North Carolina.

The Committee also took note of Title XIX regulation from the State Department of Social Services, indicating that all providers of service under Title XIX should accept the Title XIX payment as payment in full, and voted to register complaint of this regulation to the State Department of Social Services in connection with the implementation of Medicaid in the State of North Carolina on January 1, 1970.

The Committee also recommended that the fiscal intermediaries for Title XVIII and Title XIX programs be advised that it would be desirable if the fiscal intermediaries were one and the same company in order to make collection of simultaneous payments under the Medicare and Medicaid programs more practical.

The Committee on Social Service Programs voted to notify the Blind Commission that North Carolina State Medical Society policy was that usual customary and reasonable fees for services rendered under this program would be charged in accordance with the official policy of the North Carolina State Medical Society.

The Committee also voted to notify the North Carolina State Department of Social Services of the

existence of the State Medical Society Committee on Social Service Programs, in order to offer them full cooperation and help in the implementation of the Medicaid Program. This was done through the President of the Medical Society who intervened both with the Department of Social Services and with the Governor, requesting that the Medical Advisory Committee be appointed for the Medicaid Program and suggesting appointments from the Medical Society on this Advisory Committee. It is to be noted that President Beddingfield was appointed to the Governor's Medical Advisory Committee on the Medicaid Program.

The Committee also passed a motion recommending that if a recipient of services under the Medicaid Program pays his bill to the physician, that the recipient be eligible for reimbursement by the Department of Social Services upon presentation of a properly receipted bill from his physician.

The Committee on Social Service Programs also voted to recommend to the Executive Council that the involved committees of the State Medical Society, namely Maternal and Child Care, Marriage and Family Counselling, Social Service Programs, Chronic Illness and Comprehensive Health Planning, be requested to study and give recommendations pertaining to the care of indigent of North Carolina especially with relation to the population explosion in the State and in the nation.

The Committee on Social Service Programs has continued to cooperate both with the State of North Carolina Department of Social Services and with the North Carolina Blue Cross/Blue Shield, Inc., serving as fiscal intermediary for the Medicaid Program in notifying physicians of the State as to the mechanics of the program implemented as of January 1, 1970.

The fact that the Medicaid Program, in its original form, was submitted to the Department of Health, Education and Welfare without any appreciable involvement by the Medical Society, was in part due to the rather late appointment of the Medical Advisory Committee on Medicaid about November 14, 1969, after the program had already been submitted to the Department of Health, Education and Welfare.

The Committee on Social Service Programs is observing the Medicaid Program in the early months of its implementation in North Carolina and stands ready to serve the doctors and patients of the State in any future problems which arise in connection with its continuing implementation.

John Glasson, M.D., Chairman

COMMITTEE ADVISORY TO STUDENT AMA CHAPTERS (SAMA)

The SAMA Section meeting on May 19, 1969 at the Annual Session of the Medical Society of the State of North Carolina was centered around a discussion of the cost of medical care. A panel of students from the three medical schools participated with Frank W. Jones, M.D., as Moderator. The final

portion of the program was scientific paper presentations from each medical school. A dinner meeting followed with Amos N. Johnson, M.D., as the Speaker. The Award for the outstanding student paper was won by Theodore H. Kiesselbach of UNC. Credit should be given to Jay D. Cook of Duke who was chairman for the afternoon and evening sessions.

At the present time plans for the 1970 Section meeting are incomplete but will probably be a discussion centered around consumer aspects of medical care.

The full committee met at the Conclave at Mid Pines in September 1969 and recommended that changes be made in the Constitution and By-Laws to allow medical students full membership in the State Society. Two other states have done this and have expressed the view that dialogue and exchange of ideas have been valuable to all. There is a great deal of interest among students about current medical practice and philosophy, and many are anxious to contribute to the solution of problems relating to medical care.

Several meetings were held during the year with representatives from each chapter of SAMA and dealt with the 1970 Session, national meetings, and various cooperative programs. It is clear that SAMA is an active and vital force in each of our three medical schools.

Oscar L. Sapp, III, M.D., Chairman

UTILIZATION COMMITTEE

The Committee on Utilization has continued its efforts to provide all aid possible to the physicians of North Carolina in making the work of the Utilization Review Committee more effective. At the same time efforts to simplify the work of the Review Committee have been carried out in order to make the work of the committee less of a chore. A real service was rendered the Utilization Committee by the North Carolina Medical Journal publishing in September summaries of the topics presented at the six regional meetings on "Simplified Approaches to Utilization Review Functions." Reprints of this article, upon request, have been sent to physicians in our state as well as physicians and hospitals in many other states.

At the annual conclave of the committee meeting at Mid Pines in September, the committee discussed the problems which the implementation of Title XIX would present. In our general hospitals the mechanism is already present in the existing Utilization Review Committee to review patients admitted under Title XIX. However, in the Extended Care Facilities help from our committee will probably be needed. Extended Care Facilities, working closely with individual hospitals, will ask the Utilization Review Committee of that hospital to serve the Extended Care Facility. Where this is not possible the county medical society will be asked to provide a Utilization Review Committee for the Extended Care Facility.

The committee is cognizant of the fact that HEW is constantly making changes in what the requirements are for approval of Extended Care Facilities in regards to Title XIX. It is felt that now it is most necessary that we as physicians do all in our power to meet our responsibilities and keep all reviews and decisions possible at the local level. We neither need nor desire third party participation in this work.

The Utilization Committee, working closely with the North Carolina State Board of Health and North Carolina Blue Cross and Blue Shield, will continue in its efforts to keep informed on all pertinent changes pending or happening in the field of utilization. When necessary action will be taken and the physicians of North Carolina so informed.

H. Fleming Fuller, M.D., Chairman

COMMITTEE ON RADIATION

The North Carolina State Board of Health continues to supervise the radiation protection of physicians and dentists offices who have ionization equipment and/or isotopes.

The Medical Care Commission continues to supervise the radiation protection coming under its jurisdiction.

W. C. A. Sternbergh, M.D., Chairman

THE AD HOC COMMITTEE ON THE RELATIONSHIP OF THE MEDICAL SOCIETY TO NORTH CAROLINA BLUE CROSS-BLUE SHIELD

It should be noted that recommendations of the Committee acted upon at the 1969 Annual meeting by the House of Delegates are in process of implementation. The Board structure of North Carolina Blue Cross-Blue Shield remains unchanged. The Blue Shield Committee will be increased to 26 members, to be elected by the 1970 House of Delegates, having broad geographical and specialty representation. The Chairman of the Blue Shield Committee, as well as the President-Elect, becomes an Ex-officio member of the Board of North Carolina Blue Cross-Blue Shield. As a result of the phasing out of the "Doctor's Plan", a new statement of understanding is in effect. Participating agreements have been discontinued.

At a meeting of the Committee September 27, 1969 at Mid Pines during the Conclave it was decided that further study of the organizational structure of other State Plans should be accomplished and data compiled to be reviewed before the Annual meeting. It was agreed that data representing a cross section of the 78 existing plans should be collected.

A full time Medical Director was discussed. It was decided that an expanded Blue Shield Committee giving the membership broader representation and more sensitive to the philosophy of physicians in active practice could serve the profession better than a full time Medical Director.

Attention was given to the practice of releasing patient records by hospitals without consultation with the attending physician. It was pointed out that insurance policies usually include agreement by the subscriber for release of information. Mr. Kenneth Beeston agreed to research this point and report to the Committee at its next meeting.

Representatives of this Committee have, on occasions, been invited to meet with the Blue Shield Committee in pursuit of the previously stated primary goal to upgrade communication and understanding between North Carolina Blue Cross-Blue Shield and the members of the Medical Society.

John S. Rhodes, M.D., Chairman

AD HOC COMMITTEE ON TENURE OF OFFICE

The ad hoc Committee on Tenure of Office met and recommended to the Executive Council on October 12 the following tenure for specific officers:

President-elect, one year.

First Vice-President, one year.

Second Vice-President, one year.

Constitutional Secretary, three year term, for two terms.

The Speaker of the House, one year term, three years of tenure.

The Vice-Speaker, one year term, three years of tenure.

The Ten Councilors who are elected, three by lot for one year, three by lot for two years, four by lot for three years, shall serve for two consecutive terms.

The Ten Vice-Councilors, three by lot for one year, three by lot for two years, four by lot for three years, for two consecutive terms.

The two delegates to AMA to serve two year terms. There is no limit recommended on tenure.

The two alternate delegates to the AMA to serve two year terms. There is no recommendation for tenure in this office.

There are two members on the North Carolina Board of Medical Examiners for six year terms, one term tenure.

The North Carolina State Board of Health, four year terms. There are two consecutive terms recommended.

It is recommended that the terms of service on the North Carolina Board of Health be set up on a staggered basis.

The North Carolina Medical Care Commission, four year term, two term tenure.

The Board of Trustees of North Carolina Blue Cross Blue Shield, four year term, two terms.

The Editorial Board of the North Carolina Medical Journal, four year terms, two terms.

The 26 members of the Committee on Blue Shield are by lot, one year, two years and three years and the Constitution already defines this, for one year only.

The Committee on Medical Education, one-third for two years, one-third for four years and the remainder for five years. The appointments are to be staggered and the Constitution already defines this. One five year term maximum.

The Report of the ad hoc Committee on Tenure of Office was unanimously approved by the Executive Council on October 12, 1969.

Simmons I. Patrick, M.D., Chairman

COMMITTEE ADVISORY TO MEDICAL ASSISTANTS

North Carolina Association of Medical Assistants yearly gains maturity, strength, and increasing number of members. The annual meeting was held in Salisbury in April, 1969, and was attended by Dr. Emmett S. Lupton, Dr. Dave Welton, Bill Hilliard, and myself and was an outstanding event. Our State Association must continue its close relationship with the NCAMA.

Philip Naumoff, M.D., Chairman

GOVERNOR'S COORDINATING COUNCIL ON AGING

This was Mr. Yelton's first meeting as Chairman. Following his brief introduction of himself, Mr. Eddie Brown reviewed some of our previous discussions and in the discussion of the function and staffing of the single organizational unit for which a preliminary draft was presented. This is a move to indemnify the North Carolina Governor's Coordinating Committee as the "single organized unit" in the State to handle HEW outlines and funds. The formality and acceptance of the presented outline for the State achievements of Title III of The Older American's Act will probably be accomplished at a called meeting sometime in March. The Committee was assured that \$75,000 was immediately and presently available for the purpose of staffing. In addition, \$26,000 from the State legislature this year would present an operating budget of \$101,000. Copies of these drafts are on hand if they are desired.

It is felt that this primarily political committee may be in line for increasing roles.

Dr. John C. Reece received a letter from Dr. E. B. Howard, (Executive Vice-President, American Medical Association) to the effect that help from Chicago was on the way for Easter Appalachia, Inc., in the next few days. It is hoped that something can be done to dissipate the apathy of the individuals in the four-county medical groups who apparently have little insight as to what the very near future holds for them.

Thomas R. Nichols, M.D.
Medical Society Representative to
Governor's Coordinating Council on Aging

REPORT OF CONSULTANT ON PODIATRY

It is my recommendation that the Medical Society continue to have a Consultant on Podiatry so that there will be some channel through which to maintain liaison with this group other than our legislative committee. The legislative committee, of course, would come quickly on the scene if and when there are any concrete recommendations about changing the law.

Thomas B. Dameron, Jr., M.D., Consultant

COMMITTEE ON MEDICARE

The Committee on Medicare had its initial and organizational meeting on Thursday, September 25, 1969 and its second meeting on January 30, 1970. Meetings are planned on a quarterly basis. There is frequent communication maintained among all parties by telephone and by correspondence in between the regular meetings.

Interest in and representation at the meetings of this Committee have been very high. In addition to Medical Society officers and officials, both meetings have been attended by representatives from the Part B carrier, Prudential Insurance Co. of America in High Point, N. C., North Carolina Blue Cross-Blue Shield, North Carolina Hospital Association, North Carolina State Board of Health, the Regional Representative of the Bureau of Health Insurance, Social Security Administration, from Atlanta; several of our AMA delegates, including Dr. John R. Kernodle, trustee; a chairman of our Insurance Industry Committee, and several interested physicians.

The function of the Medicare Committee is to maintain frequent contact with and continuous communication with the Part B carrier, Social Security Administration regional office in Atlanta, the Part A carrier, and the State Board of Health, as well as other persons and committees and organizations which are involved in the many problems incident to the operation of this program in North Carolina. Specific adjudication of physicians' claims is handled by the Insurance Industry Committee.

The Committee has accomplished a good workable basis for interflow of information among these various parties and intends to increase and improve upon this communication. A method to be used by the Part B and Part A carriers when they need supplemental information from hospital records has been worked out and is now in use; they have agreed to contact the attending physician first.

Specific problems have been discussed at length and considerable progress made. Examples are (1) payment of physicians in a teaching hospital setting, (2) guidelines for utilization of services in extended care facilities, (3) new wording to be used when allowances are reduced on assigned cases, and (4) Medicaid patients who have Medicare coverage -- the use of the combined claim. Several other policy

matters have been taken up by the chairman by correspondence.

David Goe Welton, M.D., Chairman

NORTH CAROLINA BOARD OF
MEDICAL EXAMINERS
STATISTICS

November 1, 1968 - October 31, 1969

Total number applicants granted license	473
By written examination	182
By endorsement of credentials	291
Limited license	95
Hospital residents	75
County or counties	18
Staff state institutions	2
Special limited license	106
Hospital residents	55
Postgraduate foreign exchange	
hospital residents	44
Staff state institutions	7
Written Examination failure	27
Part I	5
Part II	20
Parts I and II	2
Applicants rejected license	
by endorsement of credentials	3
Applicants declined permission	
to take written examination	0
Hearings	13
Petition	
recommend reinstatement	
narcotic tax stamp	2
Petition reinstate license	
to practice medicine	2
License to practice medicine	
voluntarily surrendered	1
Alcoholism	
Narcotic addiction	1
Interview re violation barbiturates	
and stimulant drugs	2
Interview re violation	
narcotic laws	2
Routine interviews, licentiate	
under surveillance	3
License practice medicine reinstated,	
on probation	1
Declined reinstate license to	
practice medicine	1
Recommend reinstatement narcotic	
tax stamp	1
Surrender narcotic tax stamp	2
Investigation of SBI	1

**REPORT TO THE HOUSE OF DELEGATES—
MEDICAL SOCIETY OF THE STATE OF
NORTH CAROLINA FROM NORTH CAROLINA
BLUE CROSS BLUE SHIELD, INC.**

The Physician Trustees of North Carolina Blue Cross and Blue Shield had an almost 100 percent attendance at the Board Meetings of the Corporation during the past year. In addition many of them were very active in subcommittees of the Board dealing with the affairs of the Corporation.

The consolidation of the two antecedent corporations which was reported to you last year has progressed rapidly and with fewer major problems than had been anticipated. During the year the new certificate which provides greatly expanded benefits for outpatient and office services and greater parity between surgical and nonsurgical medical care was introduced. This policy has been well received by physicians, hospitals, and subscribers alike. There are still many problems to be worked out with the conversion from the old to the new certificates and efforts are being made to streamline the paper work associated with the new certificate. To this end the Corporation has increased its computer capacity and has obtained the services of outstanding experts in the field of computer programming so that claims may be made as simple as possible and paid as rapidly as possible. There has been much consultation between the Physician Trustees, Officers of the State Medical Society, and individual physicians in order to simplify claim forms. While there is still much to be desired in this area, we feel that management is making a very sincere and dedicated effort to simplify the claim forms and to insure accuracy and promptness in the payment of the claims.

The 1969 House of Delegates voted to adopt the recommendation of the ad hoc Committee on the Relationship of North Carolina Blue Cross and Blue Shield as reported by its Chairman, Dr. John S. Rhodes. This was offered in a new statement of understanding signed by the President of the Society and the Corporation. This confirms the right of the Medical Society to elect eight physician trustees, one third of the Board membership, and clarifies an expanded function of the Blue Shield Committee, particularly with regard to the right to determine allowances of benefits to be paid on the basis of usual customary and reasonable charges. The Corporation readily accepted the Committee's suggestion that both the President-Elect of the Medical Society and the Chairman of the Blue Shield Committee be added to the Board as ex officio members. During the past year, Dr. Louis DeS. Shaffner, President-Elect, and Dr. Robert F. Crouch, Blue Shield Committee Chairman, have attended all Board Meetings and have added very much to the deliberation of this Board. The Physician Trustees particularly wish to commend the Blue Shield Committee for the outstanding job it has performed during the past year.

In December of 1969 North Carolina Blue Cross and Blue Shield was named by the State as the intermediary for the administration of the Medicaid Program which became effective on January 1, 1970.

Implementation of this program has certainly presented many problems, and as this report is written has not been in existence long enough to reach any valid conclusions. Certainly in any new program of this magnitude there will be many rough spots and many changes which will be required. It is our hope, and our intention, to follow this program very closely and to be certain that the problems of the providers shall be made known to the Department of Social Services.

The Corporation's Professional Relations Staff has been enlarged. There are now five area field representatives who call regularly on physicians' offices and who conduct workshops for office assistants. These sales representatives are always available to assist the physician in any problems which may arise between the physician and the Corporation.

During the year 1969 each physician in the State was supplied with a new "Doctor's Manual and Blue Shield Index" providing complete information on the new statement of understanding between the Medical Society and the Corporation, and details of the Administration of Benefits paid on the basis of usual customary and reasonable charges and detailed information on the provisions of the New Blue benefits. In early 1970 another manual was mailed to every physician in the State outlining the provisions of the North Carolina Medicaid Program with instructions to the physician as to how he could best carry out his part in this program.

The entire Board of North Carolina Blue Cross and Blue Shield was shocked and saddened by the unexpected death of Dr. Paul McNeely Deaton of Statesville, one of our most beloved and respected members. On February 25 the entire Board was very happy to welcome Dr. Roy S. Bigham, Jr., of Charlotte, who was appointed by the Executive Council to fill Dr. Deaton's unexpired term. Dr. Bigham had served for many years as Chairman of the Blue Shield Committee for the State Society.

In October, 1969 the Chairman attended the annual Program Conference of the National Association of Blue Shield Plans. This was a worthwhile meeting and provided opportunity to hear and discuss current and future aspects of health care prepayment with physicians and Blue Shield officials from all parts of the country.

As a result of past year activities, the Committee further recommends that physicians providing surgical assistance service submit independent claims in their own names and with their own statement of charges. The Committee also recommends that physicians ordering services such as diagnostic xrays or laboratory tests by referral to another physician or through a hospital outpatient department supply sufficient information as to symptoms or diagnosis, accident or non-accident cause, etc., so as to permit the referral physician or hospital to submit a Blue Shield or Blue Cross claim on an independent basis.

The Blue Shield Committee has received excellent cooperation and assistance from the officers and staff of North Carolina Blue Cross and Blue Shield, the executive office of the State Medical Society, and the

President, President-Elect, and the Chairman of the Professional Service Commission under which the Blue Shield Committee operates.

Robert P. Crouch, M.D., Chairman

W. Howard Wilson, M.D., Vice-Chairman

ANNUAL REPORT-1969

TO: Committee on Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) of the Medical Society of the State of North Carolina.

The increase in the number of claims paid in 1969 as compared to 1968 is due to the continuing expansion of eligible persons and the comprehensive inpatient and outpatient program for retired service personnel and their dependents plus the dependents of former military personnel who died while in a retired or active duty status.

For the year 1969, the CHAMPUS Program paid a total of \$6,252,283 to physicians, hospitals, and other providers of care. When we compare this figure to the amount paid strictly to North Carolina physicians, the analysis shows that \$.32 was paid for physician services out of every \$1.00 paid for covered services under the CHAMPUS Program.

Beginning with care provided on and after February 1, 1968, payment for professional services were based on the usual, customary, and reasonable concept. Administration is based on statistical data completed by the corporation as well as guidelines and determinations by the Medical Society CHAMPUS Review Sub-Committee. Physicians have welcomed the change to usual, customary, and reasonable. However, if a physician does not choose to accept an assignment, all charges should be billed to the patient who can be reimbursed by Blue Shield for an amount not to exceed what would have been paid the physician.

Under a separate contract, the corporation reimburses hospitals for authorized civilian care provided beneficiaries under the new program. From 1957 through 1969, \$18,047,053 was paid to North Carolina hospitals for 129,310 claims. The total paid to all providers since 1957 is \$33,966,066 for 325,602 claims.

We wish to express our sincere appreciation and gratitude to the CHAMPUS Committee and Claims Review Sub-Committee; its chairman, David M. Cogdell, M.D.; vice chairman, James H. Manly, Jr., M.D.; and to Mr. William N. Hilliard, Executive Director of the Medical Society of the State of North Carolina for their cooperation and guidance in administration of the program.

Respectfully submitted,
Marvin A. Campbell, Manager
CHAMPUS Department

THE NORTH CAROLINA MEDICAL CARE COMMISSION

A Word About the Agency's Responsibilities

The Commission is concerned with improving health programs particularly on the community level through the planning, financing, construction, standardization, and staffing of medical facilities including hospitals, nursing homes, public health centers, rehabilitation facilities, mental health centers, and buildings for the mentally retarded. As the State's hospital licensing agency, it promotes and enforces maintenance and operating standards for patient care. Using State-supported scholarships, the Commission helps young people to enter health careers and to attract them to practice where acute shortages of health professionals exist especially in small towns and mental health facilities.

Medical Facility Planning and Construction

During 1969, forty medical projects were underway costing \$118 million--representing 24 hospital facilities providing 3,000 additional beds to the State, 1 nursing home, 2 public health centers, 8 mental health centers, 5 facilities for the mentally retarded, and 1 rehabilitation facility. In addition to these, the Commission has been readying during the year 7 hospital projects that would furnish 734 more beds and 3 mental health centers to serve 8 counties. These projects costing \$25.5 million can start as soon as sufficient Federal appropriations are released to the Medical Care Commission. NORTH CAROLINA HAS CONSTRUCTED MORE HEALTH FACILITIES UNDER THE HILL-BURTON ACT THAN ANY OTHER STATE. It ranks 2nd in the number of general hospital projects, 7th in beds and 3rd in public health centers developed under the Federal program. Among all the states, irrespective of Federal aid, North Carolina ranks 15th in the number of general hospital beds. Of the 9 South Atlantic States, it is 2nd in both number of hospitals and beds.

SCHOLARSHIPS FOR MEDICAL AND RELATED HEALTH STUDIES

The Commission's efforts to provide more people to man the State's expanding health programs were strengthened by the 1969 General Assembly which substantially increased appropriations for scholarship loans for medical and paramedical studies. During the year, 220 new students representing a 27% increase over 1968 were approved for participation in the program. Twenty-eight or twice as many medical students accepted loans for this academic year as an indication of their willingness to practice in a small town in North Carolina or in one of its mental health programs. The Commission is now supporting 393 students enrolled in medical and related courses including 59 in medicine, 60 in dentistry, 156 in nursing and 38 in pharmacy. During the year, 10

small towns in the State were benefiting from medical doctors trained under this program; 20 were receiving services from Commission-assisted dentists and 5 have pharmacists who obtained Commission loans.

Hospital Licensure and Certification

During the year, 159 hospitals involving 2,000 beds were surveyed to determine their safety for patient care. Many of these received consultation by the Commission to help them retain eligibility to admit patients under the Medicare program. The number of hospitals meeting Federal criteria increased this year from 88% to 92% of the total in operation.

Other Activities

The Commission is now committed to several studies designed to improve hospital care and to promote construction economies. A major investigation of hospital emergency services is now underway in an attempt to devise some solutions to this problem of mounting public concern. Two other studies completed during the year have received national attention: One devised a method for improving maintenance of mechanical systems in small hospitals; another developed the first planning guide for hospital coronary care units.

The above activities were conducted within an annual administrative budget of \$363,000, of which \$244,000 was State appointed.

William F. Henderson, Executive Secretary
J. Street Brewer, M.D.
Powell G. Powell, Sr., M.D.
Hugh R. McManus, Jr., M.D.

COMMITTEE ON ANESTHESIA STUDY

There was no meeting of the Anesthesia Study Committee held this year due to change in chairmanship last fall and due to my absence for several weeks in November and December because of family illness.

However, contact with the members, past chairman, and Dr. Davis has been made in order to review our thoughts. A meeting will be planned in the near future.

A. A. Bechtoldt, Jr., M.D., Chairman

REPORT OF THE EXECUTIVE VICE-PRESIDENT

JAMES T. BARNES

Mr. SPEAKER, President Beddingfield, President-Elect Shaffner, Members of the House of Delegates and friends in medical endeavors, of each and all of the twenty-three (23) annual reports which I have made to this body I find this one the most difficult undertaken. A year ago I made such a report which some complimented for its philosophic connotations—perhaps not scarce in its predictions. In referring to twenty-two (22) years of service, I said in part: "These years have yielded great personal satisfactions in service achievements—there have been factors manifested of late which qualify any concept of assurance for the future". How prophetic! Prophetic as relates to individual status and stature, but prophetic to change in structure, change in administration and, more important, change in the conception of the entire field of medical endeavor in this nation and the lack of an assurance of what the future of medicine, as a salutary system in our history, fortells. Again, as I said it a year ago, this is not a prediction of doom, but rather an expression, out of deep devotion, of a "concern of one who surveys—years of history, philosophy and action by an historic organization in professional pursuit of public good and service". Again the accumulation of affecting factors are even more disturbing at this point in time.

Observedly there are depressive and repressive manifestations related to generations. Perhaps these "gaps" find many applications to individuals and to organizations which have endured for great lapses of time. It has been said that the aged become "uncertain as to their goals and values of life and their future", and that "most aging persons in our culture have great difficulty in accepting, without resentment and inferiority, their aging as a natural process".

Could one find application of such tenets to organizations which have endured for a century or more with simulating lines of essential concepts and philosophy which have grown ancient and have resisted change? Can such organization find benefit from sincere evaluation of its achievement of important things in its existence and yet the room for useful change to paramount achievement for the future? Or will organization as we have known it be supplanted by untried and innovative devices the useful portents of which can only be conjectured in our time—the doing of a "thing"? Well, one asks pardon for such misgiving in this militating process of change.

All of us want to "do our thing"! This affection is equally applicable to persons and structures of performance. Yet we can observe that aging is a new and scarcely explored segment of life and therein lies a challenge, the response to which must shape the direction of the future, individually and professionally as relates to usefulness and achievement, and this response should be changed from the negative to the positive with an attitudinal

expectation of the potentials of good in achievements for the all of us. In this process there must be the proper concern for social and economic independence in our scheme of personal as well as national systems. Negative excorciations without overriding truth must give way to the vital and positive factors which have exemplified achievements of the past; that these may intergrate with useful and proven patterns of change as we undertake performance in the future roles of productive work and achievement for mankind. Independence will be essential to the framework, whatever it may be, if success is to be attained.

It would be the hope and desire of this writer to engage in this preservation of the cause. To be involved, to take joint part in whatever move this Society decides upon and undertakes in policy and to contribute judgment and experience in the course of your efforts to achieve a continued usefulness to your members, to objectives of public goals of purpose and to the people you serve. This would be a preferred course any less usefulness would be deleterious to a life and to a system of action

No one should assume to evaluate the great performances for the Society of President Edgar Beddingfield. His pattern of laden service to the causes of the Society and to the Medical profession is legion. His performances are much wider than this Society extends and his influence' awide, are awarded with achievements which I would scarcely need to enumerate to you. One would hope his genuine counsel would long avail and that his course will continue to serve the causes of medicine.

Fiscal matters of the Society for the first three-quarters of the period for which I report (1969) were on course and sound. In the audit report of September 30, 1969 one will find that anticipated revenues for the period exceeded expectations for the entire year. Moreover the rate of anticipated and authorized expenditures stood then in excess of one hundred and twenty-five thousand dollars below authorizations. That September date terminated my status as Treasurer of the Society which position I held for thirteen years. On said date the total assets of the Society were reckoned at \$674,037.90 and a total net worth was reckoned at \$426,908.72. I have the sense of pride in this aspect of that report. Of course accrued values enhances the fiscal status and, conservatively, it is estimated the assets of the Society at the conclusion of my Treasurership was considerably in excess of three-quarter million dollars. Considering the low level of the Society assets at the beginning of 1957, this record of fiscal attainment must be considered a worthy one. Moreover, a recent calculation indicates that efforts of the Executive Director over a twenty-two year period resulted in revenues, other than from membership support, of an amount approximating one million dollars. One can know that this achievement accounts for efforts sometimes beyond the call of duty, sometimes in a climate demanding

aggressiveness to get that fiscal result. As for the year-end fiscal report and in the future, the succeeding Treasurer will report and here reference is made to Mr. William Hilliard's annual report for the period subsequent to September 30, 1969 fiscal data. He will formally present the annual audit report for 1969 done in January 1970.

Finally the closing months of the year which this report covers, I was engaged under the recent title description of Executive Vice-President. Specifically entailing concern and action related to assignments of your President I have continued to perform in relationship to:

- (a) Journal operations as Business Manager
- (b) State and national legislative matters
- (c) Some liaison with AMA
- (d) Considerable liaison with committee activities.
- (e) Marked liaison with state agencies and voluntary agencies.
- (f) Continued directional capacities with organizations at state and national level with which there was previous identification
- (g) Considerable liaison on request of the Society headquarters staff.
- (h) Marked liaison with the people and organizations concerned with the contractual construction of the headquarters building. This is now on scheduled progress.
- (i) Continued relationship in the area of liaison to those responsible for the administration of Medicare in this state and region.

These have been useful undertakings and there has been a daily offering of duty in these respects. Of course the level of performance and of assignments have been a contrasting experience to the many effective years of work as an administering executive covering more than forty years of duty in that field. Consequential disappointment, if not humiliation, attends a position which has been inadequately defined and a performance lacking in details of assignment and ultimate accounting. One would hope that the above expression is not viewed as a sense of emotion of lack of appreciation, but to crown a career of achievement and recognized usefulness with some elements of isolations, scarce future tenure and security, and indefinite assignment is a difficult situation to one who has served with humility a quarter-century in a manner devoid of expressed dissatisfaction and without incident of ineptness to which any consistent point was made.

Then, finally, no one can find greater satisfaction than in the love of the cause one has served. This tribute I do pay to the Society and to the profession it represents. If there are capabilities remaining, these were committed to you more than two decades ago and while a capacity remains it is fully committed again today.

Respectfully,
James T. Barnes
Executive Vice-President

REPORTS RECEIVED LATE

SEVENTH MEDICAL DISTRICT

The Seventh Medical District has had no unusual problems during the preceding year. Two things merit particular attention. The first, is that in October, Dr. Vernon Andrews of Mt. Gilead, North Carolina and Montgomery County Society, in preparation for assuming the position of Chief of Staff of his hospital, entertained at his Lake Tillery home. The guests included the doctors of the county society, selected political leaders, members of the Board of Trustees of the Hospital, representatives of local industry, and some key physicians from outside the county concerning the State Medical Society and the University of North Carolina Medical School.

The various facets of medical care of the community were discussed by the several groups present in serious fashion and all present were entertained with excellent food and drink. This was a successful venture and possibly is a good pattern for other county groups to follow in an effort to improve the efforts of communities toward coordinated medical care.

The State Society lost Elias Faison by death, this being felt at all levels of organized medicine and his honor has been perpetuated in Mecklenburg County by several of his patient-benefactors. Thus, an Elias Faison Lecture Series has been started in the Charlotte area to be presented annually. The first lecture was in March and the guest lecturer was Dr. Bruce Logue, Atlanta, Georgia. This was well attended and well enjoyed by about four hundred physicians. This, in addition to the previously established Heineman Foundation Lectures and Matheson Foundation Lectures provide the Seventh District with opportunity to hear visiting lecturers of significant importance under the pleasant conditions of food, refreshments and the comradery engendered thereby.

C. L. Stuckey, M.D., Councilor

COMMITTEE ON MEDICAL EDUCATION

The Committee on Medical Education has met on a number of occasions during the past year to explore in some detail the problems and opportunities before it. We have forwarded one recommendation, that concerning the Physician Assistant Program, as requested by the House of Delegates. We have further established contact with the program, although, as of this date, no additional request for counsel has been received.

The ice has been broken on the preparation of a calendar of educational opportunities for our members. In view of another action of the committee this has moved slowly.

In April, we spent a full day meeting with the Dean and associated staff at UNC Medical School considering the problems of expansion of class size and alteration in medical school curriculum. After due deliberation, the Committee felt that the Executive Council and the Medical Society should support very strongly the efforts to expand the Medical School in Chapel Hill. The Committee took no stand in reference to a second medical school but felt that expansion at Chapel Hill

was essential no matter if or when a second state supported school be established.

The most significant contribution the Committee has made to date is the ironing out of the details concerning the hiring of a Coordinator of medical education to work closely with the State Medical Society although funded and supported by the Regional Medical Program. Dr. Robert Smith of the UNC Medical School and Dr. John Chambliss of Rocky Mount, representing the Regional Medical Program, along with Dr. Jack Wilkerson of Greenville and Dr. James Alexander of Charlotte, representing the Committee on Medical Education, comprise the Search and Recruitment Committee for the hiring of the individual. Once he is hired and begins to devote full time to this area, the many other recommendations now being held in abeyance should be implemented rapidly.

I regret that my situation has been such as to prohibit more active work on the Committee this year. I greatly appreciate the confidence my appointment as Chairman demonstrated and I hope that my successor will find the membership as interested and cooperative as I.

Daniel A. McLaurin, M.D., Chairman

COMMITTEE ON PHYSICAL AND VOCATIONAL REHABILITATION

This Committee met on October 12, 1969. At that meeting there was considerable discussion regarding the financial situation in regard to State Division of Vocational Rehabilitation payments to physicians and a motion was made that although the committee realized the handicap under which the states agencies were functioning that the physicians should continue to send their bills at the usual and customary fee level.

Another motion passed was that expressing disappointment in the General Assembly in their failure to appropriate sufficient state funds to obtain all of the federal funds which could have been obtained by this State for the purpose of rehabilitation.

A proposal was projected that the Medical Society of the State of North Carolina in conjunction with the North Carolina Division of Vocational Rehabilitation conduct a survey of physicians in North Carolina regarding the need for comprehensive rehabilitation centers. This is still being worked upon by the Vocational Rehabilitation Agency and is not yet ready to be done as a questionnaire type thing. This is particularly true in view of the fact that subcommittees for the Eastern part of the State continue to study the situation in that area and until they are ready, we will be unable to proceed with this.

The Committee nominated as Physician of the Year for the Governor's Committee on the Employment of the Handicap, Dr. Eben Alexander, Professor of Neurosurgery at the Bowman Gray School of Medicine and Dr. Alexander was subsequently named physician of the year by the Governor's Committee.

We have not held any further meetings and I believe that this is essentially our activities.

E. H. Martinat, M.D., Chairman

Summary of Minutes of Meetings of the Executive Council

NOTE: As recommended by the Finance Committee, the Executive Council authorized that just the salient actions of the Executive Council will be reported in briefed form.

The verbatim transcript of the Executive Council minutes are on file in the Headquarters Office and may be reviewed or pertinent portions excerpted on request.

CALLED MEETING OF THE EXECUTIVE COUNCIL IN EXECUTIVE SESSION AUGUST 3, 1969

Sheraton Motor Inn, Greensboro, North Carolina, 10:00 a.m., Sunday, August 3, 1969.

The Executive Council met in a called meeting, in Executive Session, President Edgar T. Beddingfield, Jr., calling the meeting to order, with a quorum declared by Secretary Charles W. Styron.

President Beddingfield introduced several items for discussion that were not on the agenda, as follows:

1. Request to purchase the Greenfield property next to the presently owned property on which the Headquarters Building is to be constructed on Person Street.
2. Request to study the activity of the Presidency by Dr. David Welton.
3. Request to discuss Medicaid.

The Executive Council approved that these items be added to the agenda.

—Discussion of the request to purchase the Greenfield property next to the presently owned property on which the Headquarters Building is to be constructed on Person Street developed a resolution which was adopted to purchase the property. See separate REPORT A — REPORT OF THE EXECUTIVE COUNCIL, page 90, HOUSE OF DELEGATES, May 17, 1970.

—After some discussion about the property currently owned on the Raleigh-Durham Highway, the following resolution was made, but action was not taken since the council had previously been granted the authority to sell this property.

RESOLVE, that the President, with the advice and consent of the Executive Committee and the Finance Committee, be, and he is hereby authorized to sell the property now owned by the Society located on and adjacent to the Raleigh-Durham Highway No. 70, for such sum and upon such terms as he may deem advisable and for the best interests of the Society.

Prior to the sale of this property a timber survey will be made for the purpose of selling hardwood.

—Dr. Welton indicated that he wished to discuss certain problems related to the Presidency and suggested that President Beddingfield and President-Elect Shafner might wish to excuse themselves from the room, which they did for this discussion.

Dr. Welton then discussed the possibility of a per diem allowance for the President during the time that he is out of his office.

It was pointed out that the President loses a great deal of time out of his office and suffers a considerable

financial loss during the Presidential year. Further comments were made in regard to this problem, and it was stated that in the past certain members of the Society had failed to serve or have served with some reluctance because of the loss of time in practice during the year.

It was suggested that President Beddingfield should appoint an ad hoc committee for such study.

—A request had been made for a fiscal intermediary for Medicaid. Several resolutions were made but it was finally decided by substitute motion that no fiscal intermediary should be chosen. This motion was duly carried and no recommendation was made.

Dr. Beddingfield then discussed at some length problems associated with Medicaid.

—A Study of The Organization of the Headquarters Office, June 1969 was presented by Mr. Michael Pearson, representative of Rothrock, Reynolds, and Reynolds, Inc. A Study in depth of the Headquarters functions had been previously authorized.

See separate REPORT B—REPORT OF THE EXECUTIVE COUNCIL, page 90, HOUSE OF DELEGATES May 17, 1970.

Copies of the report were made available to Dr. Jesse Chapman, Chairman of Blue Ribbon Committee No. 1, in June of 1969. Copies were made available to the Officers and members of the Executive Council and copies are on file in the Headquarters Office.

Finally, adoption of the details of the report as amended, with dates of implementation including possible necessary minor changes in dates as recorded in the plan of action would be left to the discretion of the Executive Committee and the consulting firm. The above motion was moved, duly seconded, and unanimously accepted.

—Dr. Beddingfield then stated that beginning on August 21, 1969, he intended to visit each of the Society's ten districts for the purpose of discussion of matters of importance to the Medical Society of the State of North Carolina.

—The Executive Council adjourned the Executive Session.

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FALL EXECUTIVE COUNCIL MEETING SEPTEMBER 28, 1969 (MORNING SESSION)

The Fall Meeting of the Executive Council convened at 9:00 a.m. in the Meeting House of The Mid Pines Club, Southern Pines, North Carolina, President Edgar T. Beddingfield, Jr., presiding. Secretary Charles W. Styron called the roll and declared a quorum.

Dr. Beddingfield announced a departure from precedent in this Fall Meeting of the Executive Council in

that only routine business would be conducted at this meeting and that another Executive Council Meeting would be held in Raleigh on October 12th, to hear the reports of the Committees and Commissioners from the Conclave of Committees just completed.

—Dr. Wayne J. Benton, Chairman, Committee on Finance presented the proposed budget for 1970.

Dr. Benton, referring to item G-4, the emergency and contingency fund, stated that it was voted at the last meeting to give Med-Pac \$1,000 and this is included in this particular item. It was noted that a letter from Dr. Cosgrove reminded the Committee on Finance that Med-Pac was left out for this year and asks that they be given an appropriation of \$2,000 in the 1970 budget rather than the customary \$1,000.

The motion was made, duly seconded and passed that \$2,000 be appropriated for Med-Pac.

It was moved, duly seconded and approved, that item A-16 in the budget be changed to read, "Salary and Deferred Compensation for the Executive Vice President."

The Executive Council approved the addition of a new "C" budget item to be entitled "President's Visitation Program" in the amount of \$2,000, on motion duly made, seconded, and passed.

There being a number of other items on the agenda having a bearing on the budget for next year, and considering that the Executive Council would meet again in two weeks, on October 12, the Council on motion duly made and seconded, endorsed the budget in principle with final action to be taken two weeks hence.

—The President stated that the House of Delegates authorized the Finance Committee and the President to, in their discretion, proceed with the sale of the property on Highway No. 70, the Raleigh-Durham highway property. Dr. Beddingfield stated that he had signed a contract placing this property on the market for sale in the hands of Charles Douglas realtor at an asking price of \$275,000.

On motion duly made and seconded, the Council approved that this Council go on record as endorsing the action of the President in offering for sale the land on the Raleigh-Durham highway.

—Dr. A. Hewitt Rose, Jr., Chairman, Committee on Headquarters Facility and Planning, presented a progress report of the new proposed Society Headquarters Building with charts and diagrams showing the configuration of the building and floor plans. He was assisted by Mr. G. Milton Small, Architect, and by Mr. Ford S. Worthy, Jr., Real Estate Consultant. Mr. Small presented a proposed invitation for bids, with a suggestion that the date of October 30, 1969 be established for opening of bids. Plans and specification to be on file and may be examined in the office of G. Milton Small & Associates at 105 Brooks Avenue, Raleigh; at the Charlotte and Raleigh offices of AGC and the Dodge Plan Room in Raleigh.

On motion duly made and seconded, the Executive Council approved the recommendation of Dr. Rose's Committee on Headquarters Facility and Planning that invitations for bids be invited, forthwith!

—Dr. A. Hewitt Rose, Jr., Chairman, Committee on Headquarters Facility and Planning, on the advice of the Society's Real Estate Consultant, Mr. Ford Worthy, Jr., recommended the Committee be authorized to proceed with a Lease to the Cancer Society at a rental rate of \$5 per square foot with an escalation clause. On motion, duly seconded, the Executive Council approved the recommendation.

—The Executive Council by unanimous action elected Dr. David G. Welton to fill the unexpired term of the late Dr. Elias Faison as a delegate to the American Medical Association, a term expiring December 31, 1971.

—The Executive Council, by unanimous action, elected Dr. James E. Davis to fill the unexpired term of Dr. David G. Welton as an Alternate Delegate to the American Medical Association, a term expiring December 31, 1970.

—The Executive Council unanimously approved that a resolution in commemoration of the late Dr. Elias Faison be transmitted to the American Medical Association.

—The Executive Council approved the purchase of a \$100,000 Accidental Death Benefit Insurance and \$2,500 Medical Expense Reimbursement (after a \$300 deductible) Insurance policy for Officers, Councilors, Vice Councilors, Commissioners and Ex-Officio Members of the Executive Council, Staff, Committee Chairmen, Committee Members, AMA Delegates and Alternate Delegates while on official travel for the Society. See separate REPORT C—REPORT OF THE EXECUTIVE COUNCIL, page 91, HOUSE OF DELEGATES, May 17, 1970.

Executive Session

An Executive Session of the Executive Council was convened at 2:00 p.m., President Edgar T. Beddingfield, Jr., Presiding.

President Beddingfield stated, "Let the record show the President presented to the Council a progress report on the Rothrock, Reynolds & Reynolds survey which included a review of the Executive Council actions of August 3rd and subsequent activity in this area by the Executive Committee and by the President including a report of conferences that have been held with all employees of the Medical Society."

A motion was duly made, seconded and passed by the Executive Council setting October 1st as beginning implementation of the Rothrock, Reynolds & Reynolds report and that the President be instructed to notify all agencies and societies of the change at the headquarters office.

—The Executive Council approved a motion, duly seconded, that the filling of the position of systems analyst, recommended in the Rothrock, Reynolds & Reynolds report, be held in abeyance until the Council decides at some future time to put it into effect.

(Afternoon Session)

The Meeting of the Executive Council reconvened at 2:45 p.m., President Edgar T. Beddingfield, Jr., Presiding.

—The Executive Council, on motion duly made and

seconded, approved the Society joining both the North Carolina Citizens Association and the North Carolina Consumer Council.

—The Executive Council, approved as a continuing policy, a \$25 annual contribution to the American Association of Medical Assistants, on motion duly made and seconded.

—The Executive Council, on motion made, seconded and passed, approved that the maximum total professional income permitted for qualification as an Affiliate Member be increased to \$10,000 per year.

—On motion duly made and seconded, the Executive Council approved that the Executive Committee can make a policy decision on any problem involving dues, to facilitate the administration of the Society.

—The Executive Council approved a motion, duly seconded, that it take no official action on the MediCard Concept thereby neither approving nor disapproving it. By additional motions, duly seconded and passed, the Executive Council did approve acceptance of MediCard Inc. advertising in the North Carolina Medical Journal and paid space as a technical exhibitor at the Annual Meeting, but disapproved granting them access to the mailing list.

The Executive Council, on motion made, seconded and carried, endorsed a proposed letter by the President to the Deans of Osteopathic Colleges and to the Executive Director of the American Osteopathic Association.

—The Executive Council authorized acceptance of Committee Conclave dates at the Mid Pines Club as follows: September 22-26, 1971; September 27-October 1, 1972; and September 26-30, 1973. 1970 dates are already confirmed with the Mid Pines Club, September 23-27, 1970.

—The Executive Council, by unanimous action, elected Dr. Thornton R. Cleek of Asheboro, as Vice Councilor for the Eighth District.

The meeting was adjourned.

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CALLED MEETING OF THE EXECUTIVE COUNCIL MEETING

October 12, 1969

(Morning Session)

A Special Meeting of the Executive Council convened at 9:30 a.m. in the Elizabeth Room, Sir Walter Hotel, Raleigh, N. C., President Edgar T. Beddingfield, Jr., Presiding, with Secretary Charles W. Styron declaring a quorum present.

The Executive Council, on motion duly made and seconded, approved a recommendation of The Council on Planning, Blue Ribbon Committee No. 2, that the \$5,000 Society reserve fund for Rehabilitation be transferred to the North Carolina Medical Society Foundation, Inc., for general purposes of the Foundation.

—The Council on Planning, recommended to the Executive Council the consideration of a recommendation to the Committee on Constitution and By-Laws that Commissioners be given status with vote on the Executive Council on a year to year voting basis. The Executive Council, on motion made, seconded and

passed unanimously, accepted the recommendation and referred it to the Committee on Constitution and By-Laws.

—The Council on Planning and the Committee on Hospital and Professional Relations, in complementing recommendations proposed conveying to the membership of the State Society the prime importance of having a due process clause in reference to medical staff privileges in all hospital by-laws in this state. It was proposed that it be recommended to each hospital staff that hospital by-laws be reviewed with specific regard to the inclusion of rights of appeal of staff members and to conformity with the Joint Commission on Accreditation of Hospital Standards. Motion was made, seconded and passed that the recommendation be accepted and implemented.

—The Executive Council, on motion duly made and seconded, approved the proposal of the Committee on Hospital and Professional Relations that it be recommended to each hospital medical staff that their by-laws be reviewed for the purpose of updating such by-laws, as necessary, at least every three years.

—The Committee on Hospital and Professional Relations recommended to the Executive Council that the State Medical Society adopt a policy of recognizing the eligibility for membership in the State Medical Society of those osteopathic physicians duly licensed by the North Carolina State Board of Medical Examiners for the practice of medicine who meet the other existing prerequisites for membership as specified in the by-laws. On motion made and seconded, the recommendation was passed by the Executive Council with one dissenting vote. See separate REPORT D—REPORT OF EXECUTIVE COUNCIL, page 91, HOUSE OF DELEGATES, May 17, 1970.

—The Executive Council approved a recommendation of the Committee on Hospital and Professional Relations, that the policies of the Crippled Children's Division of the State Board of Health be questioned and that it be asked to publish to the Medical Society a statement of the rules and regulations and proper channels through which a physician obtains listing or approval and how approval for rendering routine and emergency care for patients in this category is obtained. See Separate REPORT E—REPORT OF THE EXECUTIVE COUNCIL, page 91, HOUSE OF DELEGATES, May 17, 1970.

—On recommendation of the Committee on Physical and Vocational Rehabilitation, the Executive Council approved a resolution urging the State of North Carolina to appropriate sufficient state funds to the Division of Vocational Rehabilitation, in the future, in order to obtain maximum matching federal funds for North Carolina. See separate REPORT F—REPORT OF THE EXECUTIVE COUNCIL, page 92, HOUSE OF DELEGATES, May 17, 1970.

—The Executive Council voted approval of a request of the Committee on Physical and Vocational Rehabilitation to participate in a survey of physicians regarding services and location for development of four to six rehabilitation center facilities, survey to be con-

ducted in cooperation with the State Division of Vocational Rehabilitation.

—The Committee on Scientific Exhibits recommended that the Executive Council approve a \$200 award which would be divided into two \$100 awards as a first and second award, or on a basic science and clinical science basis, that this decision be left to the discretion of the Committee on Scientific Exhibits each year to judge and determine. This award to be a permanent arrangement and plaque be placed on the winning exhibit when judged and determined. Such plaque or certificate to be given to the exhibitor along with the check. Motion to appropriate \$200 to be used for awards for scientific exhibitors was made, seconded and passed by the Executive Council, but that it be reconsidered in the budget each year.

—The Executive Council approved an appropriation of \$200 for a worthy student unsponsored exhibit, and that if there be only one student exhibit which is in the opinion of the Committee on Scientific Exhibits is worthy of the award that it can be so extended.

(Afternoon Session)

—The Committee on Cancer requested the Executive Council to endorse and support a cancer mortality study comparable to the maternal mortality study. If approved, a subcommittee of the Cancer Committee to be appointed to explore this concept further and to report back with proposals regarding organization and funding. On motion made and seconded, the Executive Council approved the request.

—The Executive Council approved an interpretation of the By-Laws to the effect that Vice-Councilors be voting delegates in the House of Delegates.

—The Executive Council voted approval of a recommendation from the Committee of Physicians on Nursing that the Council go on record as reaffirming the firm support to diploma Schools in North Carolina and that these diploma programs be given the \$400 per

student that was set aside for them by the Legislature.

—Approval was given to the Committee of Physicians on Nursing request for authority to explore further the Academy of Nursing concept.

—A proposal to change the Constitution and By-Laws to accept medical students into full membership into the State Society was accepted and referred to the Committee on Constitution and By-Laws for presentation to the House of Delegates.

—A report of the ad hoc Committee on Tenure of Office containing recommendations for specific offices and the recommended terms for each office was accepted by the Executive Council and referred by way of the Committee on Constitution and By-Laws to the House of Delegates for their consideration.

—Executive Council approval for the following motion was passed. The Committee on Medical Education has reviewed with great interest the experiments and developments of programs in education of various types of physician's assistants in the organization of the American Association of Physician's Assistants. The Committee is impressed with the programs that have been presented and endorses in principle the experimentation in education programs in this field. The Committee has indicated that it is interested in and willing to advise the leaders of such programs during their formative stage. The committee, however, will assume no continuing responsibility for this program.

—The Executive Council, on recommendation of the Committee on Medical Education, expressed approval in principle of the program of the training of pediatric and neurologic assistants at the Bowman Gray School of Medicine.

—The Annual Budget for 1970 was presented by Dr. Wayne J. Benton for the Finance Committee, and on motion made and seconded, was passed by the Executive Council. The Budget Estimates for 1970 are as follows:

BUDGET ESTIMATES

January 1, 1970 to December 31, 1970

RECEIPTS: (Estimated)		394,215
Estimated balance January 1, 1970	NIL	
Assessment 3,417 paying members*	324,615	
Sales (estimated on 1969)	3,000	
Author contributions to Cuts	150	
Revenue Unexpected (estimated)	500	
Technical Exhibits (estimated)	15,500	
Journal Net Advertisement (estimated local on 1969)	10,000	
Journal Net Advertisement (estimated National on 1969)	38,000	
**AMA Remittance 1% of dues processed (estimated on 1969)	2,200	
MEDPAC Remittance 1% of dues processed (estimated on 1969)	250	
EXPENDITURES: (Estimated)		394,215
Schedule A	192,261	
Schedule B	78,666	
Schedule C	33,200	
Schedule D	11,149	
Schedule E	16,350	

*Based on Dues \$95 per member per annum

**To be appropriated to Secretarial Budget A-6

MINUTES OF THE EXECUTIVE COUNCIL

63

Schedule F	21,880
Schedule G	40,709
EXCESS OF RECEIPTS OVER EXPENDITURES	-0-
EXCESS OF EXPENDITURES OVER RECEIPTS	-0-
RESERVES: (Costs, \$26,104.55—Land)	
SUBMITTED TO COMMITTEE ON FINANCE	Sept. 7, 1969
SUBMITTED TO EXECUTIVE COUNCIL FOR APPROVAL	Sept. 28, 1969
SUBMITTED TO HOUSE OF DELEGATES FOR APPROVAL	May 17, 1970

A. EXECUTIVE BUDGET	192,261
A-1 President, expense of (travel & Communications)*	6,000
A-2 President's secretarial assistance	5,000
A-3 Secretary, travel of*	300
A-4 Executive Director-Treasurer, salary of (WNH)	18,000
A-5 Executive Director-Treasurer, travel of*	4,000
A-6 Executive Office, Secretarial & Clerical Assts.**	30,000
A-7 Executive Office, equipment-replacements	2,000
A-8 Executive Office, expense of (12 months rent, communications, printing, and supplies, repairs & replacements of expendables)	16,500
A-9 Bonding (in effect to 1972)	-0-
A-10 Audit (Quarterly & Annual)	1,500
A-11 Taxes (salary tax)	4,275
A-12 Insurance: fire, liability & Compensation	2,396
A-13 Membership Record System (addition to)	8,595
A-14 Publications, reports & executive aids	200
A-15 Insurable: interest insurance & retirement plan	5,295
A-16 Salary and Deferred Compensation for the Executive Vice President	23,000
A-17 Office Manager, salary of	10,200
A-18 Executive Vice-President, travel of*	4,000
A-20 Administrative Assistant, salary of	9,000
A-21 Administrative Assistant, travel of*	2,000
A-22 Controller, salary of	12,000
A-23 Field Representative No. 1, salary of	14,000
A-24 Field Representative No. 2, salary of	7,000
A-25 Field Representatives, travel of (1 & 2) as Finance Committee Allocates:* ..	7,000

*Basis: Real for personal maintenance and travel 10c per mile and/or common carrier rate and for official purposes.

**Any revenue derived from collection efforts related to American Medical Association dues and processing of same shall accrue to this item of the budget.

B. JOURNAL BUDGET	78,666
B-1 Journal, publication	45,000
B-2 Journal, cuts for	500
B-3 Editor, salary of	2,500
B-4 Assistant Editor, salary of	5,955
B-5 Editorial Office, expense of (12 months rent, communications printing and supplies, repairs and replacements)	950
B-6 Journal Business Manager's Office expense of (12 months communications, printing and supplies, repairs and replacements)	750
B-7 Business Manager's Office equipment for	100
B-8 Journal, travel for (Local and National)	200
B-9 Taxes (salary tax)	736
B-10 Sales tax on Journal subscriptions an Roster sales	1,415
B-11 Roster, publication	7,300
B-12 Executive Council Reports, Transactions, Annual Reports, printing of	8,000
B-13 Advertising Secretary, salary of	5,260

C. INTRA-FUNCTIONAL ACTIVITY BUDGET	33,200
C-1 Executive Council expense of and travel of Councilors including district travel	6,000
C-3 Legislative Committee, expense of (Local and National activity)	3,000
C-4 Maternal Health Committee, expense of (Secretarial, Communications, printing and supplies)	4,000
C-6 Committee on Arrangements	100
C-7 Scientific Exhibits Committee and Audio-Visual Program, expense of (including \$200 for Scientific Exhibit Awards and \$200 for Student Scientific Exhibit Award)	1,175
C-8 Committee on Mental Health	650
C-9 Committee on Mediation	200
C-10 Committee on Chronic Illness	2,000
C-11 Committee in general, expense of	3,000
C-12 Committee on Nominations	200
C-13 Committee on Occupational Health	200
C-14 Committee on Professional Insurance	100
C-16 Committee on Negotiations	C-11
C-17 Committee on Student AMA (section & transportation & Delegate to SAMA one each Medical School Chapter (3))	1,800
C-18 Committee on Disaster Medical Care	400
C-19 Committee on Industrial Commission	250
C-20 Committee on Constitution and By-Laws	250
C-21 Committee on Medical-Legal	100
C-22 Committee Advisory to N. C. Department of Motor Vehicles	400
C-24 Committee on Anesthesia Study	NIL
C-26 Committee on Blue Shield	500
C-27 Committee on School Health	NIL
C-28 Committee on Social Services Program	275
C-30 Insurance Industry Committee	300
C-31 Rural Health Function, sponsorship of 4-H Health activity for one trip to National 4-H Club for State Health Winner, and Today's Health subscription to 4-H Health winners; Dues Rural Health Safety Council; Rural Health Conference	800
C-34 Committee on Scientific Works	C-11
C-35 Committee on Headquarters Facilities	500
C-36 Committee on Family and Marriage Counselling	200
C-37 Committee on Medicine and Religion	200
C-38 Committee on AMA-ERF	100
C-39 Ad Hoc Committee on Task Force XIX	NIL
C-40 Committee on Scientific Awards	200
C-41 Committee on Physical and Vocational Rehabilitation	175
C-42 Committee on Eye Care & Eye Bank	100
C-43 Committee on Appalachia and State of Franklin	200
C-44 Blue Ribbon Committee No. 1	100
C-45 Blue Ribbon Committee No. 2—Long Range	100
C-46 Committee on Finance	100
C-47 Utilization Committee	100
C-48 Committee on Medicare	175
C-49 Committee on Medical Education	2,000
C-50 Committee on Comprehensive Health Service Planning	250
C-51 Committee on Medical Aspects of Sports	300
C-52 Committee on Association of Professions	100
C-53 Committee of Physicians on Nursing	400
C-54 Committee Liaison to North Carolina Pharmacy Association	100
C-55 ad hoc Committee on Relationship with North Carolina Blue Cross Blue Shield, Inc.	100
C-56 President's Visitation Program	2,000

D. EXTRA FUNCTIONAL ACTIVITY BUDGET	11,149
D-1 Delegates to AMA, expense of (8-including Alternates to each Annual and Clinical Session)	6,349
D-2 Conference Dues	200
D-3 Woman's Auxiliary (contribution to entertainment, travel to National Auxiliary for 2 and productions)	4,000
D-4 Medical History Allocation Authorized by Executive Council	600
E. PUBLIC RELATIONS BUDGET	16,350
E-3 Committee Chairman, out of State travel	500
E-5 Public Relations, Equipment for	500
E-6 Public Relations Office, expense of (12 months rent, communications, printing and supplies, repairs and replacements)	6,000
E-8 Publications and Executive Aids	100
E-9 Audio-Visual depiction; photography, radio-motion picture, production, distribution and printing, purchase of films, etc.	1,000
E-10 Educational distribution; reprints, periodicals, press materials, pamphlets and dodgers for educational purposes; production, distribution and printing, binding, stuffing and mailing	800
E-11 News and press releases, production and printing of	400
E-12 Public Relations Bulletin, production and printing of	3,500
E-13 State High School Science Fair Program, expense of	350
E-14 Exhibits and Displays: Purchase, rental, production, fabrication and transportation of	650
E-15 Annual Officers Conference	1,000
E-16 Physicians Press Award	NIL
E-17 Public and personified activities in the field of Public Relations	850
E-18 Collateral Public Relations with other committee activities	500
E-19 N. C. Rescue Squad First Aid Trophies	200
F. ANNUAL SESSIONS (116th) CONVENTION BUDGET	21,880
F-1 Program, Production of	1,800
F-2 Hotel and Auditorium expense	4,000
F-3 Publicity promotion, expense of (reporters and expense)	500
F-4 Entertainment (general involving personnel)	900
F-5 Orchestra and Floor entertainment	2,500
F-6 Guest Speakers (5) expense and/or honorarium	1,000
F-7 Banquet Speaker, fee and expense	750
F-8 Electric Amplification, operators, installations and screening auditorium	125
F-9 Booth installations, supplies, expense, signs, (Scientific and Technical) including exhibit expense & Promotion	5,000
F-10 Projection, expense of (service rentals)	1,000
F-11 Badges (members, guest, exhibitors, auxiliary)	200
F-12 Reporting Service for Transactions (sessions and sections 13)	2,500
F-13 Rental, extra facilities, trucks for sections and/or exhibits	175
F-14 Exhibitors entertainment (at 5% of Exhibit Income)	700
F-15 Banquet expense	400
F-16 Police Security	330
G. MISCELLANEOUS BUDGET	40,709
G-1 Legal Counsel, retainer fees for	9,000
G-2 Reporting (Executive Council, etc.)	2,500
G-3 Fifty Year Club Pins and Certificates, and President's Jewel	250
G-4 Contingency and Emergency	8,339
G-5 Retirement System for Society Employees	12,000
G-6 Ad valorem Taxes	2,470
G-7 Association of Professions	200
G-9 AAMC (Association of American Medical Colleges)	250
G-10 Commissioners, expense of	1,200
G-11 Executive Committee, expense of	500
G-12 Officers, expense	3,000
G-13 Travel and Maintenance, expense of essential Headquarters Staff for out of state sessions and conferences	1,000

—The Executive Council voted its approval for the President to proceed with a proposed Groundbreaking Ceremony for the new Headquarters Building, following awarding of the construction contract. An appropriate Groundbreaking Ceremony was held on the building site, corner of North Person and East Lane Streets, in Raleigh, N. C. on Thursday, December 11, 1969.

—The Committee on Child Health and Infectious Diseases recommended and the Executive Council approved that "The Medical Society of the State of North Carolina support pending federal legislation to provide needed funds for the President's communicable disease amendment."

—The Executive Council moved, seconded and passed, the recommendation of the Committee on Child Health and Infectious Diseases for endorsement of the recommendation of the Public Health Service Advisory Committee on Immunization Practices with the American Academy of Pediatrics and the printing of this statement in the North Carolina Medical Journal.

—The Committee on Chronic Illness recommended that the Medical Society of the State of North Carolina support statewide application of a multi-phasic screening project, if approval of the county medical society affected is secured prior to the implementation of the project in a community and a medical advisory committee for that county is appointed to supervise conduct of the project. On motion made, seconded and passed, the Executive Council approved the recommendation.

—The Executive Council approved the recommendation of the Committee on Chronic Illness that the State Medical Society supports the worthiness and desirability of holding the proposed Governor's Conference on Arthritis.

—The Executive Council acted to approve the recommendation from the Committee on Drug Abuse endorsing the efforts of the Greensboro Branch of the Guilford County Medical Auxiliary in their project "Operation Damn" (Drugs, Alcohol, Marijuana and Narcotics), in order that Auxiliaries across the state might be influenced to undertake similar programs.

—The Executive Council approved a recommendation from the Committee on Marriage Counseling and Family Education reaffirming previously stated policy that "The Medical Society of the State of North Carolina recognizing that knowledge of sex and family living is fundamental in the pursuit of happiness and stable citizenship, again endorses responsible education in these matters in schools and churches in concordance with the moral traditions of this country."

—The Executive Council, on recommendation from the Committee on Marriage Counseling and Family Education, approved the motion that "To provide a mechanism by which materials and programs dealing with family and sex education can be screened to insure their conforming to the high standards established by the Medical Society of the State of North Carolina, the Committee on Marriage Counseling and Family Education offers its services to re-

view on request such materials and programs."

—The Committee on Comprehensive Health Service Planning recommended, and the Executive Council approved, that the Society take steps re-emphasizing to the membership the necessity of becoming involved in Regional Health Planning Councils. See separate REPORT G—REPORT OF THE EXECUTIVE COUNCIL, page 92, HOUSE OF DELEGATES, May 17, 1970.

—The Committee on Comprehensive Health Service Planning requested approval for inquiring of the Association for the North Carolina Regional Medical Program as to whether or not they have any data with reference to the now occurring patient referral patterns in this state as far as the several medical catchment basins that currently exist and, further, if Regional Medical does not have such data, to ask if they can procure such data. On motion duly made and seconded, the Executive Council approved the request.

—The Executive Council approved that a request should be made to the Department of Administration for early involvement of the Medical Society Task Force reports of the Governor's Advisory Council on Comprehensive Health Planning.

—Approval was given by the Executive Council for endorsing that a plea be made by the Committee on Comprehensive Health Service Planning to the membership of the State Medical Society that a very quick feedback be sent to the State Society headquarters by any member of the Society who is aware of the formulation or the beginning formulation of a Regional or Area Health Planning Council.

—The Executive Council endorsed the Committee on Comprehensive Health Service Planning recommendation that each component society of the State Society appoint a Committee on Comprehensive Health Service Planning at a county level and that such recommendation should include the material submitted from time to time to the current incumbent officers be either passed on to this committee or passed on to their successors in office and carefully marked as such.

—The Executive Council approved that a recommendation be made to Congress that they should consider the appointment of a representative advisory group, containing a majority membership of providers in the health field, to the end that realistic approaches to health planning services could be accomplished. This committee, or council, or commission being advisory to the particular division of government that would have purview of the area.

—The Committee on Social Service Programs presented a motion to the Executive Council recommending that arrangements be made for a reasonable professional fee to be paid for each patient by the third party payor under the Medicaid program. See Separate REPORT H—REPORT OF THE EXECUTIVE COUNCIL, page 92, HOUSE OF DELEGATES, May 17, 1970.

—The Executive Council approved a request of the

Committee on Social Service Programs that the President of the Society be requested to inform the Department of Social Services of the State of North Carolina of the existence of this Committee; that it is the intent of the State Medical Society that it replace the previous Committee Liaison to the Department of Welfare and that the Committee would welcome the opportunity to meet with the staff of the Department of Social Services to consider governmental aid programs at any time.

—The Executive Council approved a recommendation that the Chairman of the Committee on Medicare protest, to the Regional Bureau of Health Insurance Office, the disclosure to newspaper media of figures indicating that there are a number of physicians in North Carolina who received over \$25,000 in Medicare payments, and the release of such information implying abuse and/or fraud until these charges are substantiated because of the shadow of doubt that it casts on the entire medical profession.

—The Executive Council approved a motion from the Committee on Medicare as follows: That the Medical Society of the State of North Carolina request the fiscal intermediary of Part "A" and the carrier of Part "B" of the Medicare program in those instances where information concerning physicians' services is desired to seek that information first from the physician.

—The Executive Council considered a Resolution from the Union County Medical Society opposing the Medicare Law in general, and referred the resolution to the House of Delegates, without prejudice and without comment. See separate RESOLUTION No. 1 presented by Union County, page 99, HOUSE OF DELEGATES, May 17, 1970.

—The Executive Council approved a recommendation from the Committee on Eye Care and Eye Bank that it communicate with the Chairman of the Board of the Commission for the Blind and convey the following message from the Society:

- (1) A feeling of cooperation on the part of the North Carolina ophthalmologists.
- (2) Recognition of the fact that the Society considers the care of Blind Commission patients primarily a medical problem, as shown by statistics compiled by the Blind Commission in the past.
- (3) The endorsement of the Medical Society for the present method of eyeglass procurement, whenever possible, through licensed optical firms.

—On recommendation of the Committee on Legislation, the Executive Council approved distribution of the paperback edition of "At Your Own Risk" be distributed to the following, insofar as the budget will permit in the order of preference:

- (1) To members of the General Assembly;
- (2) To all medical students;
- (3) To high school libraries;
- (4) To candidates for the General Assembly.

—The Executive Council approved a recommendation of the Committee on Legislation that an ad hoc Committee to Study Methods of Implementation of the

Uniform Anatomical Gift Act be established, to the end that orderly mechanisms might be developed for the education of the public, medical profession, hospitals, medical schools and all other interests.

—The Executive Council nominated Dr. Kenneth M. Brinkhous of Chapel Hill for submission as a candidate for the AMA Distinguished Service Award.

—The Executive Council approved the submission to the AMA of a resolution in support of the Regional Medical Program, by the North Carolina Delegation. Such resolution was submitted to the AMA for the December 1969 Clinical Meeting.

—The Meeting was adjourned.

MID-WINTER EXECUTIVE COUNCIL MEETING

February 1, 1970

(Morning Session)

The Mid-Winter Meeting of the Executive Council convened at 9:00 a.m. in the South Room of The Carolina, Pinehurst, N. C., President Edgar T. Beddingfield, Jr., presiding, Secretary Charles W. Styron calling the roll and declaring a quorum.

Dr. Beddingfield stated that for this first time in his memory and in the memory of those whom he had asked, a member of the Executive Council had been lost by death during his term of service on the Council, referring of course, he said, to Dr. Paul Deaton. He added that Dr. Deaton "was certainly an energetic and interested and useful member of this Executive Council."

President Beddingfield also said he wished to "take official note, although it's not recent, of Dr. Elias Faison's death. He was a non-voting member of this Executive Council and was our AMA Delegate. Therefore, we have lost two people on Council in recent months by death.

"And, finally, since our last meeting, one of our oldest living Past Presidents, Dr. Charles Strosnider of Goldsboro has passed away.

"So, I'm going to ask you to join me in just a moment of silence in respect of the memory of these three men: Paul Deaton, Elias Faison and Charles Strosnider."

—Dr. Roscoe D. McMillan, Chairman of the Committee Advisory to Auxiliary and Archives of History, presented a progress report on the preparation of the State Medical Society History. Following discussion of the project, the Executive Council, on motion made, seconded and passed, approved prepublication publicity and offer of the Medical Society History to the Medical Society roster, to be handled by the Headquarters Office.

—Dr. Wayne J. Benton, Chairman Committee on Finance, submitted a revised budget with no changes in the total amount of expenditures, with minor changes under various parts, and recommended its approval. On motion made, seconded and passed, the Executive Council approved the budget as revised and submitted. (see Budget Estimates for 1970 page 62

of Executive Council Meeting, October 12, 1969).

—The Finance Committee made the following recommendations:

(1) That the Executive Director and the Controller, with the approval of the Finance Committee, be allowed to change allocations without recourse to the Executive Council.

(2) That claims for reimbursable expenses shall be submitted not later than ninety days following each expenditure.

That every effort be made to have all claims submitted prior to the end of the official year and after January 30th, claims for reimbursable expense will not be honored.

The Executive Council approved the recommendations on motion duly made, seconded and passed.

—The Executive Council approved support in the sum of \$25 for the Summer Experience Program of the Allied Health Professions Manpower, a project in which the Auxiliary is very interested.

—In reviewing a supplementary report of Rothrock, Reynolds & Reynolds, reorganization of the Headquarters Office, the Executive Council approved taking no action on the recommendation regarding the employment of the systems analysis, but the question of the implementation of the systems analysis be reconsidered in six months to a year.

Approval was also given for the Executive Director to proceed in hiring the help (secretarial) needed and make the necessary adjustments in the budget, as long as staying within the total budgetary allocations.

The Executive Council on motion made, seconded and passed, authorized the president to delegate certain duties and responsibilities assigned by the by-laws to the Executive Director to the Executive Vice President, when he deems necessary.

—The Executive Council went on record as supporting the President in his suggestion that there be a Committee for Headquarters Personnel in addition to a Committee on Headquarters Facility as either two committees or appropriate subcommittee structure under the Committee on Headquarters Facility.

The Executive Council also extended its formal thanks and appreciation to the Executive Vice President, the Executive Director and their entire staff and the Society President for the facility and ease with which they have made the transition in carrying out the recommendations made in the original report of Rothrock, Reynolds and Reynolds.

On motion made, seconded and passed, the Executive Council approved that the President of the Medical Society of the State of North Carolina, with the advice and consent of the Executive Director, be authorized to consult with Rothrock, Reynolds & Reynolds on a four month continuing basis as he deems necessary for the best interests of the Society, or until such time as the Council deems further consultation unnecessary.

—The Committee on Medical Aspects of Sports presented a proposed Statement of Policy which the Executive Council, on motion made, seconded and passed,

endorsed in principle and returned to the Committee for refinement of wording and resubmission for consideration by the House of Delegates. See separate REPORT I—REPORT OF THE EXECUTIVE COUNCIL, page 93, HOUSE OF DELEGATES, May 17, 1970.

—The Executive Council, on motion made, seconded and passed, approved a resolution submitted from the Committee of Physicians on Nursing, re: Needed Improvement in Education of Allied Health Personnel. See separate REPORT J—REPORT OF THE EXECUTIVE COUNCIL, page 93, HOUSE OF DELEGATES, May 17, 1970.

—The Executive Council received and approved a program recommended by the Committee on Drug Abuse to publicize to the membership the responsibility of the practicing physician to his community to furnish leadership in the approach to the problem of drug abuse in his locality.

The Committee also recommended, and the Executive Council approved that the Governor be urged to sponsor a Conference on Drug Abuse in North Carolina.

—The Committee on Medical Education presented a recommendation, which the Executive Council approved, that the Committee on Medical Education be empowered to negotiate with the Executive Director and staff of the Regional Medical Program to define what precisely is available, what the relationships will be and if in agreement with the functions of the Committee on Medical Education and with the approval of the Executive Committee of the Executive Council of the Society, that the Committee on Medical Education be empowered to tell the Regional Medical Program to hire a coordinator on medical education.

—The Executive Council heard an interim report from the North Carolina Medical Care Commission on the activities of an ad hoc study committee studying emergency services in North Carolina. The report was presented by Mr. Duncan McGoogan, Hospital Consultant of the Medical Care Commission staff.

The Executive Council moved, seconded and passed a motion that the report be referred to the Committee on Disaster Medical Care with a request for their evaluation and their report back to the Executive Council.

(Afternoon Session)

—The Executive Council considered a request stemming from the Annual Session last year for a consideration of a division between the Section on Ophthalmology and Otolaryngology into separate Sections on Otolaryngology and Ophthalmology. The discussion indicated that a questionnaire sent out of the office of the Chairman of the Committee on Eye Care seemed to be inconclusive. Therefore, on motion made, seconded and passed, the Executive Council directed that this matter be sent back to the Section for their official action at their next session, with a recommendation to this Council.

—Distribution of the AMA Himler Report of Committee on Long Range Planning was approved, with

a copy to be sent to all members of the Executive Council and to each member of the House of Delegates. See separate REPORT K—REPORT OF THE EXECUTIVE COUNCIL, page 94, HOUSE OF DELEGATES, May 17, 1970.

—The Executive Council approved a motion that a copy of the Constitution and By-Laws be mailed to each of the elected delegates to the Annual Meeting at an appropriate time, prior to the meeting of the House of Delegates.

—A Report of the Committee on Relative Value Study was presented to the Executive Council following a recent meeting of the Committee to consider the 1969 California Relative Value Studies in the light of the fact that the North Carolina 1964 Relative Value Study was adopted almost entirely from the 1964 California Relative Value Studies.

After considerable discussion, the Executive Council, voted to receive the report as information and refer it back to the committee with suggestions from the Executive Council. See separate REPORT L—REPORT OF THE EXECUTIVE COUNCIL, page 94, HOUSE OF DELEGATES, May 17, 1970.

—Dr. Cecil Sheps, Director, Health Services Research Center, Chapel Hill, N. C., reported to the Executive Council on the existence and the activities of the Health Services Research Center.

—Dr. Delford L. Stickel presented a Report of a study of Renal Dialysis and requested Executive Council endorsement of distribution of the report to County Medical Societies and to all hospitals in North Carolina. The Executive Council on motion made, seconded and passed approved the request for such distribution.

—The Executive Council was presented a Resolution on Malnutrition from the Committee on Community Health. On motion made, seconded and passed, the Executive Council accepted the Resolution in principle, and referred it to the House of Delegates, and in the interim, requested some improvement in the wording and format be made by the Committee. See separate RESOLUTION No. 6—MALNUTRITION, page 101, HOUSE OF DELEGATES, May 17, 1970.

—Two additional Resolutions were presented from the Committee on Community Health one on the subject of Environmental Pollution and one on the subject of Pesticides. On motion made, seconded and passed, the Executive Council accepted both resolutions for information and referred them to the House of Delegates for action. See separate RESOLUTION No. 4—ENVIRONMENTAL POLLUTION, and RESOLUTION No. 5—PESTICIDES, pages 100-101, HOUSE OF DELEGATES, May 17, 1970.

—The Executive Council approved a request that the Headquarters Office plan to cooperate in printing of Fourth District Statement of District Dues and enclose the Statement with the State Medical Society Invoice for 1971 Dues to members of the State Society in the Fourth District.

—Commissioner Charles A. S. Phillips presented a Resolution concerning the North Carolina Association of Rescue Squads. See separate RESOLUTION No. 8—

NORTH CAROLINA ASSOCIATION OF RESCUE SQUADS, page 102, HOUSE OF DELEGATES, May 17, 1970. On motion made, seconded and passed, the Executive Council accepted the Resolution for information and referred it to the House of Delegates for action.

—The Executive Council approved the submission of Dr. Kenneth Brinkhous of Chapel Hill as a nominee for the Dr. Rodman Sheen Award to an American physician in recognition of outstanding contributions to medicine.

—The names of Dr. Maurice Kamp of Charlotte and Dr. Mario Battigelli of Chapel Hill were approved for submission to the AMA as nominees for consideration for appointment to the AMA Council on Environmental and Public Health.

—The Executive Council considered filling the vacancy of a Vice Councilor for the Ninth District created by the death of Dr. Paul Deaton as Councilor and upon the succession of the former Vice Councilor Dr. Thomas E. Fitz to the office of Councilor. On motion made, seconded and unanimously passed, the Executive Council appointed Dr. J. Henry Cutchin, Jr., of Sherrills Ford as Vice Councilor to serve until the next meeting of the House of Delegates.

—The Executive Council considered the vacancy created on the Board of Directors of North Carolina Blue Cross & Blue Shield, Inc., created by the death of Dr. Paul Deaton. On motion made, seconded and unanimously passed, the Executive Council elected Dr. Roy S. Bigham, Jr., of Charlotte to the unexpired term on the Board of Directors of North Carolina Blue Cross & Blue Shield, Inc.

—Reported as information was the nomination by the Committee on Physical and Vocational Rehabilitation of Dr. Eben Alexander, Jr., as "Physician of the Year" to the Governor's Committee on Employment of the Handicapped.

—A discussion was held regarding the current problems encountered by the inclusion by the North Carolina Advisory Budget Commission of Chiropractic services in the State Medicaid Plan. The Society is on record as opposing this action and the manner in which it was accomplished in this State. The suggestion of the President is that an attempt be made to obtain a ruling on the legality of this maneuver from the Attorney General of the State.

—The meeting adjourned.

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ANNUAL EXECUTIVE COUNCIL MEETING

May 16, 1970

(Morning Session)

The Annual Meeting of the Executive Council convened at approximately 9:00 a.m. in the Crystal Room of The Carolina, Pinehurst, N. C., President Edgar T. Beddingfield, Jr., presiding, Secretary Charles W. Styron calling the roll and declaring a quorum.

President Beddingfield announced there would be an executive session of the Council which he planned to schedule at twelve-thirty.

President Beddingfield stated that in the past there has been some criticism of the fact that the important policy-making decisions of the Executive Council which are left for the ultimate approval of the House of Delegates were not clearly defined for the House of Delegates. He went on to explain that this year in the House of Delegates, in addition to the resolutions which have been submitted, and instead of submitting a transcript of Executive Council sessions that separate, alphabetically identified, reports have been made of certain policy decisions. These will be assigned to the various Reference Committees just as though they were resolutions. They actually represent actions already approved by the Council, with some later developments reported and this is simply the form in which each report will be presented to the House of Delegates.

The Executive Council then reviewed the Summaries of the Executive Council meetings and the Executive Council separate Reports A through L, as contained in the packet of materials mailed in advance to Executive Council members and to members of the House of Delegates.

The President then stated that "Without objection, the chair will direct that they be referred as has been planned since we have acted on each of these items previously."

The President made note of the fact that reports had been received from all the Councilors except one, and these were in the printed Compilation, and asked for any additional report. In the absence of any additional Council reports the Annual Reports of Commissioners were considered next. See SEVENTH MEDICAL DISTRICT—Councilor Report, page 58, received after original compilation printed.

Dr. Charles A. S. Phillips, as Chairman of the Public Service Commission, offered the additional report for the Committee on Physical and Vocational Rehabilitation that the Committee has requested that physicians should continue to send their bills to the Vocational Rehabilitation Division at usual and customary level although the pay schedule is considerably lower. The report was accepted and referred to the House of Delegates, on motion made, seconded and passed. See COMMITTEE ON PHYSICAL AND VOCATIONAL REHABILITATION Report, Page 58, received after original compilation printed.

Dr. David G. Welton, Chairman of the Committee on Medicare, indicated there was one bit of information which he had neglected to pass on to Dr. John Glasson as Chairman of the Developing Government Health Programs Commission. Dr. Welton went on to report that one thing the committee has been trying to do was to get a change in the wording used when a claim, which has been submitted to the Part "B" Medicare carrier is reduced. The terminology used has been something like "more than the allowable charge." He also reported that North Carolina's AMA Trustee, Dr. John R. Kernodle, had an opportunity to take this up with the Social Security Administration and it is anticipated that the wording will be rewritten. On motion made and seconded, the Council

approved that the additional report for the Committee on Medicare be accepted and referred to the House of Delegates.

Dr. Henry J. Carr, Jr., Chairman, Committee on Constitution and By-Laws presented the report of the Committee on Constitution and By-Laws encompassing proposed changes in the Constitution and By-Laws for submission to the Executive Council and the House of Delegates. The Executive Council, after suggesting minor grammatical and clarifying changes, approved a motion, duly seconded, that the entire report of the Committee on Constitution and By-Laws be referred to the House of Delegates and to a Reference Committee. See page 82, House of Delegates, May 17, 1970, Report of the Committee on Constitution and By-Laws.

On request of the Committee on Constitution and By-Laws, the Executive Council approved a motion, duly made, seconded and passed, that the Committee on Constitution and By-Laws proceed with its work to improve the grammatical construction of the Constitution and By-Laws and then report the proposed changes as blanket changes to be presented as such, lay on the table for a year and be voted on the next year.

Dr. Lenox D. Baker indicated, as information for the Executive Council, that he had been appointed by the Governor to the Committee for Reorganization of State Government. He is apparently the only representative from the health agencies of the state, or from any of the health professions. Dr. Baker indicated he would appreciate the help and advice of the Medical Society to assist him in this capacity.

President Beddingfield presented a summary report for the Committee on Legislation: 1) He indicated there was some indication of need for regulation of commercial blood banks over and above that presently provided by National Institute of Health licensure. He also stated that the General Statutes Commission has circulated a draft of a proposed new statute which would declare blood to be a professional service rather than a commodity.

2) On the subject of physicians' assistants, President Beddingfield reported to the Council that officers of the Society, along with representatives of the Board of Medical Examiners, had extensively studied the desirability and feasibility of providing a mechanism for the accommodation of physicians' assistants into the health care team. Following extensive discussion, the Executive Council developed a resolution on motion by President-Elect Shaffner, duly seconded and passed, to be sent to the House of Delegates. See separate REPORT R — REPORT OF THE EXECUTIVE COUNCIL, page 96, House of Delegates, May 17, 1970.

3) Regarding the inclusion of chiropractic services under the State Medicaid Program, President Beddingfield reported to the Council that, as President, he had objected to such inclusion of chiropractic services under the Medicaid Program. Dr. Beddingfield gave the Executive Council a fairly comprehensive report of developments, following which the Council on motion made, seconded and passed, resolved that the Committee on Legislation, with as-

sistance of the Legal Counsel, be directed to pursue the matter and to consider relief in the court. See separate REPORT N—REPORT OF THE EXECUTIVE COUNCIL, page 95, House of Delegates, May 17, 1970.

The President reported that the Society had received a few letters from physicians questioning the propriety of the Society accepting advertising for cigarettes in the Medical Journal. After brief discussion, on motion made, seconded and passed, the Council approved a recommendation that the Journal continue to accept cigarette advertising. See separate REPORT O — REPORT OF THE EXECUTIVE COUNCIL, page 96, House of Delegates, May 17, 1970.

The morning session adjourned, with the announcement by the President that the regular afternoon session would reconvene at 2:00 p.m. and that an Executive Session would be convened immediately.

Executive Session

An Executive Session of the Executive Council was convened at 12:25 p.m., President Edgar T. Beddingfield, Jr., Presiding.

President Beddingfield stated, "Let the record show that the Council met for a period of time in executive session to consider progress in the implementation of the reorganization of the headquarters office, as has been recommended by the Rothrock, Reynolds & Reynolds report and adopted previously by the Society, that the deliberations of the executive session were not concluded and that the Council will resume in executive session at 8:00 p.m. today.

(Afternoon Session)

The Meeting of the Executive Council reconvened at approximately 2:00 p.m., President Edgar T. Beddingfield, Jr., Presiding.

Reporting for the Subcommittee on Alcoholism of the Committee on Mental Health, Commissioner John L. McCain presented a report concerned with Highway Safety and the reporting of alcoholics and allegedly mentally ill drivers to the Department of Motor Vehicles. He stated that in an effort to begin a new program to get the problem drinker off the highways, the last Legislature passed G. S. 20-17.1 which requires the reporting of names of persons to the Department of Motor Vehicles who are admitted to inpatient medical facilities who are allegedly mentally ill or alcoholic. Dr. McCain went on to report that, although those who proposed this law had good intentions, the effect of this law has many ramifications which are undesirable, including infringement of confidentiality of information and invasion of personal rights of citizens. To this end, the Subcommittee on Alcoholism, with the support of the Committee on Mental Health, submitted recommendations to the Council for referral of the problem to the Subcommittee on Alcoholism, to the Committee on Mental Health, and to the Committee Advisory to the Department of Motor Vehicles for preparation of a recommendation on the subject and report back to the Executive Council. On Motion made, seconded and passed

the Council approved the Commissioner's recommendation.

Reporting for the Committee on Mental Health, Commissioner McCain presented a report and resolution drafted at the April 12, 1970 meeting of the Committee, to the effect that the committee supported the idea of liberalization of the abortion law. It was brought out that under the existing abortion law in North Carolina enacted by the last Legislature psychiatric justifications for interruption of pregnancy were legalized. This has resulted in certain instances with the exertion of undue pressure on psychiatrists to authorize abortion procedure. After considerable discussion of divergent views, and by a vote of 10 to 3, a motion made and seconded, was passed by the Council that the Resolution be approved and forwarded to the House of Delegates recommending approval. See separate REPORT P—REPORT OF THE EXECUTIVE COUNCIL, page 96, House of Delegates, May 17, 1970.

Commissioner McCain recalled that at the February 1, 1970 meeting of the Executive Council, a number of broad objectives of the Committee on Medical Aspects of Sports were presented to the Council. The Council favorably received these objectives as listed and in the ensuing discussion recommended that a formal policy statement on the Medical Aspects of Sports be developed by the Committee and returned to the Council. As requested, the Committee on Medical Aspects of Sports has prepared just such a statement of policy which is presented for Council consideration. See separate REPORT I — REPORT OF THE EXECUTIVE COUNCIL, page 93, House of Delegates, May 17, 1970.

For the Committee on Occupational Health, Commissioner McCain reported that the committee has been impressed with the great progress in industrialization in North Carolina during the past several decades and has indicated that the health of workers constitutes a precious asset in the structure of industry and the economy of the community in general. In seeking to relate this to the private practice of medicine, he said, the need for a statement of policy on occupational health was identified. Accordingly, after a number of meetings, a statement of policy was approved for submission to the Executive Council for their action. On motion made, seconded and passed, the Council approved adoption of the statement of policy and referred it to the House of Delegates. See separate REPORT V — REPORT OF THE EXECUTIVE COUNCIL, page 106, House of Delegates, May 17, 1970.

A brief discussion period was given over to the American Medical Association Himler Report — Report of the Committee on Long Range Planning. Following discussion, on motion made, seconded and passed, the Council approved forwarding of the Himler report to the House of Delegates for referral to the Reference Committee by the Speaker. See separate REPORT K — REPORT OF THE EXECUTIVE COUNCIL, page 94, House of Delegates, May 17, 1970.

A progress report of the ad hoc Committee on Relationship with Blue Cross and Blue Shield was presented by Chairman John S. Rhodes, indicating implementation of several items. He then presented for Council consideration an additional recommendation concerning division of the North Carolina Blue Cross and Blue Shield Board in such manner that the majority of the Board for Blue Shield matters would be practicing physicians. After considerable discussion and a report by Dr. Marvin N. Lymberis on behalf of the Physician Trustees of the Blue Cross and Blue Shield Board, the Council on motion made, seconded and passed, approved that the recommendation be referred to the House of Delegates recommending disapproval. See separate REPORT S — REPORT OF THE EXECUTIVE COUNCIL, page 97, House of Delegates, May 17, 1970.

The Council was presented a progress report by the Committee on Headquarters Facility, concerning the construction of the headquarters building. The Committee also proposed the acceptance of memorial gifts for interior furnishings for the new headquarters building. Following discussion, the Council on motion made, seconded and passed, approved the proposal that the information be made public that the Society is open to help in furnishing the new building: that anyone in or out of the membership who wishes to donate may do so. See separate REPORT T — REPORT OF THE EXECUTIVE COUNCIL, page 97, House of Delegates, May 17, 1970.

A request from the State Department of Social Services for recommendations from the State Medical Society regarding Medical Review teams at the county level was presented by Dr. Bruce B. Blackmon. Such medical review teams would review all recipients under the welfare rolls for medical assistance, according to Dr. Blackmon. Following discussion and on motion made, seconded and passed, the Council approved "that the request be referred to the Committee on Social Service Programs with the recommendation that they have Dr. Blackmon present it before then and that they in turn make a recommendation to the Council."

A report for the Committee on Relative Value Study was presented by Commissioner Roy S. Bigham, Jr. The two recommendations of the Committee, following discussion, were accepted by the Council and referred to the House of Delegates on motion made, seconded and passed. See separate REPORT L — REPORT OF THE EXECUTIVE COUNCIL, page 94, House of Delegates, May 17, 1970.

A letter report for the Committee on Medical Education, over the signature of Chairman Dr. D. A. McLaurin, was read to the Council by President Beddingfield, as a progress report of the Committee. See COMMITTEE ON MEDICAL EDUCATION REPORT, page 58, received after original compilation printed. The Council, on motion made, seconded and passed, received the report as information and referred to the House of Delegates.

A report for the Committee on Professional Insurance

was presented by Dr. Wayne J. Benton as Commission Chairman. He indicated that the insurance carrier for the Society's group professional liability insurance contemplates a premium rate increase of approximately 36%, which appears to be justified in the opinion of the Committee. On motion made, seconded and passed, the Council accepted the report of the Committee recommending not to oppose the proposed increase. See separate REPORT M — REPORT OF THE EXECUTIVE COUNCIL, page 95, House of Delegates, May 17, 1970.

President Beddingfield presented a report for the Committee of Physicians on Nursing related to the existence in the State of a Joint Committee on Nursing Education as a sub-function of the Board of Education and the Board of Higher Education. The Committee requests Society endorsement of the program in principle and requests the assistance of the Committee on Legislation and the Committee on Public Relations in appropriate areas. On motion made, seconded and passed, the Council approved and endorsed the request of the Committee. See separate REPORT Q — REPORT OF THE EXECUTIVE COUNCIL, page 96, House of Delegates, May 17, 1970.

Nominees for the annual election of members of the MedPac Board of Directors was received by the Council. Dr. Welton requested that his name be withdrawn and the name of L. H. Roberston, Sr., of Salisbury was listed as a nominee in lieu of Dr. Welton, with the list of nominees as amended appearing as follows:

Eagles, Archie—Ahoskie
 Fleetwood, Joe—Conway
 Nicholson, Charles—Morehead City
 Cheek, John—Durham
 Carlson, Kenneth—Winston-Salem
 Burwell, John C.—Greensboro
 Koonce, Donald—Wilmington
 Hollister, William—Pinchurst
 Roberson, Don—Charlotte
 Eckbert, William—Cramerton
 Moffatt, Bob—Asheville
 Rhodes, John—Raleigh
 Jones, Frank—Newton
 Hughes, Jack—Durham
 DeCamp, Ledyard—Charlotte
 Thurston, Tom—Salisbury
 Cosgrove, Kenneth—Hendersonville
 Robertson, L. Harvey—Salisbury
 Beddingfield, Ed—Wilson

AUXILIARY

Crutchfield, Peggy (Mrs. A. J.)—

Immediate Past President—Clemmons

Herrin, Thelma (Mrs. Hermon K.)—Gastonia

On motion made, seconded and passed, the Council elected the above list of nominees to the MedPac Board of Directors.

Representatives to the N. C. Association of Physicians Board of Directors were re-elected as follows: Dr. John R. Kernodle, Dr. John S. Rhodes and Dr. John C. Hamrick.

On the recommendation of the Avery County Medical Society the Executive Council, on motion duly made, seconded and passed, endorsed Dr. Harold Adolph for Honorary Membership for the duration of his medical missionary service and recommended the approval of the House of Delegates.

Dr. Welton discussed the possibility of a change of the 14 day limit for submitting resolutions to the headquarters office before the annual meeting, expressing the sentiment that it is important to have the delegates' kit in their hands further in advance of the meeting. On motion made, seconded and passed, the Council recommended that the period be changed from 14 days to 30 days prior to the first day of the annual session and referred the recommendation to the Committee on Constitution and By-Laws for presentation to the House of Delegates. See REPORT OF THE COMMITTEE ON CONSTITUTION AND BY-LAWS, page 82, House of Delegates, May 17, 1970.

President Beddingfield indicated that the State Commission to Study the Problems of Emotionally Disturbed Children has requested a "position paper" from the Medical Society and that the Subcommittee on Children's Services of the Committee on Mental Health in collaboration with the Committee on Child Health was requested to develop such a document. On motion made, seconded and passed, the Council accepted the report for transmittal to the House of Delegates with the notation that the "position paper" would be available in the Reference Committee and filed in the Head-

quarters Office for reference. See separate REPORT U—REPORT OF THE EXECUTIVE COUNCIL, page 97, House of Delegates, May 17, 1970.

The Council reviewed the numbered Resolutions 1-14. Following discussion of Resolution No. 1, the Council on motion made, seconded and passed, that the resolution not be approved by the Executive Council. On motions 2-14 the Council did not pass any recommendation and they were automatically referred to the House of Delegates for consideration.

President Beddingfield presented a resolution from the Committee on Community Health (Rural and Urban), entitled "Traffic Safety." He indicated that it had a number of whereases in regard to drinking while driving and recommends that the Medical Society go on record and urge such legislation as will aid in the apprehension of the alcoholic and drunk driver and making it impossible for the courts to release drunk drivers to endanger the highways without proper rehabilitation. On motion made, seconded and passed, the Council approved presentation of the Resolution to the House of Delegates without comment. See separate REPORT W—REPORT OF THE EXECUTIVE COUNCIL, page 106, House of Delegates, May 17, 1970.

There being no other business to be brought before this session of the Council, the Council adjourned at 6:00 p.m., with the announcement by President Beddingfield that the Executive Council would reconvene in Executive Session at 8:00 p.m.

Abridged Minutes of the Meetings of the House of Delegates

SUNDAY AFTERNOON SESSION

May 17, 1970

The First Meeting of the House of Delegates of The Medical Society of the State of North Carolina convened at two-fifteen o'clock in the Cardinal Ballroom of The Carolina, Pinehurst, North Carolina.

DR. EDGAR T. BEDDINGFIELD, Jr. [President of the Society]: Gentlemen, I call to order this First Meeting of the House of Delegates of the Medical Society of the State of North Carolina.

I request your attention while I call upon the Reverend J.V.C. Summerell, Pastor of the First Presbyterian Church, Fayetteville, for our invocation.

Will you rise, please!

REVEREND J. V. C. SUMMERELL [Pastor, First Presbyterian Church, Fayetteville, N. C.]: O, thou, from whom to be turned away is to fall, to whom to be turned is to rise and in whom to abide is to stand forever, give us in all our duties Thy help and in all our perplexities, Thy guidance; in all our dangers, Thy protection; and in all our sorrows, Thy peace.

For the privilege of pilgrimage on the pathway of prayer which leads from our deepest need to Thy most bountiful grace, we give Thee humble and hearty thanks and invoke now Thy presence with us as we be servants of the master, in whose name we pray,

Amen.

PRESIDENT BEDDINGFIELD: Gentlemen, as always in the course of events, we have had substantial losses from the rank of our profession this year and prior to the convening of the business side of the House of Delegates, we now pause to pay tribute in a brief memorial service to members of the Society who passed away the past year.

I now call upon Dr. Daniel S. Currie of Fayetteville for the memorial service.

MEMORIAL SERVICE

DR. DANIEL S. CURRIE, Jr. [Vice Chairman, Committee on Necology]: Mr. President, Members of the Society and Families and Friends of whom we're gathered here to memorialize:

I'm replacing Dr. Duck, who's the Chairman of this Committee, who's away at the graduation of his daughter who composed the thought provoking poem on the front of the program that you have.

Each has a program in his hand and you will notice there are sixty-five members of our Society who have passed away in the past year.

Well it is that we do memorialize them with some thought and some action and that we consider that they have left with us a heritage that we can afford to think on and to consider at some length.

I would please ask that we now bow our heads and pray for the families and friends of these who have preceded us.

Almighty God, the giver of all gifts and talents, including knowledge, imagination and compassion, the

things that are necessary for Thy medical servants such as we, we do thank Thee for this day as we do for every day of life that Thou givest.

We thank Thee for the occasion that brings these our colleagues and cohorts together.

We thank Thee for this Medical Society. We thank Thee for it as an organization and for its individual members; those who battle with the body's ills.

We pray that Thou wilt bind strong this bond of brotherhood of those who do fight with death.

Humbly, humbly, Our Father, we invoke Thy blessing upon all projects of this Society and upon the officers and leaders alike; cause us to think straight and to act properly in all of our corporate endeavors.

Now, O God, do we thank Thee for the lives and the memories of all those, Thy servants of mankind, who have preceded us in death. We would remember their dedication to their work, the keenness of their thinking, the dexterity of their hands and the bigness of their hearts.

We ask Thy blessing upon their families and friends. Comfort them, O comfort them, by Thy spirit and cause them to think often and happily on the good those deceased did while here.

For us, we do ask Thy Holy Spirit to help us to live such lives of dedication and benefit to Thy children, as these who have gone.

We pray in Thy name,

Amen.

The Reverend J. V. C. Summerell, who delivered the invocation for the Society, will say for us a eulogy for those who have gone away.

Mr. Summerell is the Pastor of the First Presbyterian Church in Fayetteville and a well known minister in this State and other States.

Mr. Summerell!

REVEREND SUMMERELL: The word eulogy is literally a good word. It's a word of gratitude and a word of remembrance. I'm sure that you remember your associates who walked once with you, who walk with you no more, whose voices and hands were blended with you in service, but now who are still.

There is a statement in the bible which says that in the midst of life, we are in the presence of death. You, of the medical profession, who are concerned with life the quality of it and the durability of it, know that this is literally true—in the midst of life, we are in the presence of death.

As you and your colleagues, those who have gone before you in death, have experienced in the carrying out of your own labors, you know that death confronts you at every turn of the way.

What should we make then of this inevitable and inescapable fact?

If we took this merely at surface value, we might call ourselves consecrated supporters of a lost cause, but this is only surface truth. There is a larger reality which is foundation upon which all of our activity

and our effort is concerned.

For that larger truth is simply this, that death does not defeat life; death is that which makes life possible for in the life process something must die in order that something may live.

Jesus taught us this when he reminded us of the lesson of the corn or wheat that falls into the ground and from its perishing there comes a larger, fuller, nobler life. We see this in a grander sense by far in the lives of those who have preceded us.

I hope this will inspire us so to live that others coming behind us will be similarly inspired.

The nature of man is that he fears death. I wonder if this is a legitimate feat.

If we really understood that about which we labor would it not be more appropriate for us to anticipate death and fear life, for life has all the hazards and the perils and the difficulties from which death is a blessed relief.

We are in a holy chain of those who walk in the footsteps of the Great Physician, who offered himself in life with even greater consecration in death, who blessed us all in all of our generations and through all of our efforts with these words: "Because I live, you shall live also?" and with that, he set his face steadfast to Jerusalem and there he died.

Out of his death, life is made possible. Out of your consecrated service and the service of those who have preceded you, this amazing thing called life is made possible.

It leads us at the turning of the road around which now we cannot see in faith and certainty to know that life is not defeated by death, but there life gains its victory.

Dr. James Stewart a great preacher of Edinburgh tells of Hugh McHale, a young Scottish covenantor, during the time of the persecution of the church in the 1660's, young McHale was condemned to death for convictions that he was not willing to surrender. Down the streets of Edinburgh they marched him to the gallows, to his certain death and while the crowds of people looked on, there McHale shackled was led. There was a young Gallahad of the faith, indeed.

As he walked, McHale looked at the group lining the sidewalk and there he saw one of his friends weeping bitter tears and he turned to his friend and said, "Weep not for me, laddie. I have been looking forward to this day all my life! We need fear life. There is no fear in death for death is that which makes life possible!"

I find this truth confirmed in a remarkable verse in the Book of the Psalms which says:

Be you therefore steadfast, unmovable, always abounding in the work of the Lord inasmuch as you know your labor is not in vain in the Lord.

We are grateful for those who have been with us. We praise God for their memory inspiring us to follow in their stead.

Let us stand and repeat together the Lord's Prayer.

So that we may be united in this prayer, let us use the words "debts" and "debtors".

[Whereupon the entire assemblage then stood and recited "The Lord's Prayer" in unison.]

HOUSE OF DELEGATES

PRESIDENT BEDDINGFIELD: Gentlemen, this House of Delegates is the important ruling body of the Medical Society. You can overturn what committees do, Executive Council does, what the officers do. You chart the course.

If you fail to chart the course, it's left in the hands of others by default.

It's important for such a group with such authority to have an able leader. You have chosen, I believe, well, in choosing a new leader for this year.

The Medical Society has been lucky through the years in having able Speakers of its House of Delegates.

I can remember back as far as Westbrook Murphy, Donald Koonce, John Reece, back to Donald Koonce and last year, Donald retired, but he had done his work well and he had trained his successor who was your previous Vice Speaker, Dr. James Davis.

Dr. Davis, under the tutelage of Dr. Koonce, had further seasoning observing the AMA House of Delegates in action attending some meetings of Speakers of Houses of Delegates. He has been rumored that he is seen now customarily comparing Robert's and Sturgis more often than he is reading S.G.&O. [Laughter]

He has assiduously done homework to try to make this session of the House of Delegates move as expeditiously as possible.

I now introduce him to you and now turn the meeting over to the presiding officer, Dr. James Davis!

[Applause]

DR. JAMES E. DAVIS [Speaker of the House of Delegates, of the Society]: Thank you, Mr. President, for those kind words.

First of all, I would like to thank this House for the privilege of serving as your Speaker and to pledge to you my wholehearted and best efforts.

As Dr. Beddingfield has said, for nine years Donald Koonce served in this capacity and certainly in an exemplary manner.

Much of the high degree of organization, the dignity and the respect which this House of Delegates now commands are due in large part to his efforts in working with you and with former delegates towards these ends.

Those of you who were here last year, I'm sure, will long remember the magnificent and well deserved ovation given Dr. Koonce as he chose to end his tenure.

Such good work, of course, is going to be difficult to follow, but your Vice Speaker and I are dedicated to seeing that the same sense of fairness, the same degree of open and full debate and the right of everyone to have his say, that these are continued.

Certainly, the basis of parliamentary rule must be that the will of the majority will prevail and the right of everyone, and especially the minority to be heard, should always be possible.

Dr. Carr and I will strive to accomplish just that.

And, it is now at this time a genuine pleasure for me to present to you, your Vice Speaker and one upon

whom I will lean heavily, Dr Chalmers Carr.

[Whereupon Dr. Chalmers R. Carr, Vice Speaker of the House of Delegates, stood up to be recognized.] [Applause]

Good Parliamentarians and especially ones that are always right, are hard to find. We have a very good one and certainly he is right more often than not and I present our Parliamentarian, Dr. Jack Hughes.

[Whereupon Dr. Jack Hughes, Parliamentarian, stood up to be recognized.] [Applause]

Good Parliamentarians and especially ones that are always right, are hard to find. We have a very good one and certainly he is right more often than not and I present our Parliamentarian, Dr. Jack Hughes.

[Whereupon Dr. Jack Hughes, Parliamentarian, stood up to be recognized.] [Applause]

We hope that our SAMA representatives have arrived and, if so, I will ask them to stand as I call their names.

The University of North Carolina School of Medicine, Mr. Reed Underhill.

[No response]

From the Duke University School of Medicine, Mr. John Horton.

[No response]

And, from the Bowman Gray School of Medicine, Mr. Bill Ramseur.

[No response]

I hope that they will arrive and they will actively participate in the workings of this meeting.

Dr. Wilkerson, may we now please have a report from the Credentials Committee?

DR. CHARLES B. WILKERSON, Jr. [Chairman, Credentials Committee]: Mr. Speaker, we have 224 that are eligible to sit in this House of Delegates; 138 are present which constitutes a quorum.

SPEAKER OF THE HOUSE: Thank you, sir.

Actually, I believe we're required only to have a majority of those registered and certainly a majority of 138 are present, so this House is open for business.

It's very appropriate and fitting that our first order of business will be a message from our President.

All of us are fully aware of the almost limitless demands made upon the holder of this office and I think we are equally aware of the outstanding job that our President has done this year.

I think a layman summed it up pretty well recently in speaking with him and he is a mutual friend of ours and one who has worked with Ed. Beddingfield on many projects, and he asked "What is the Medical Society going to do when Ed finishes his term of office? It seems they'll have to elect two or three Presidents to keep the pace going!"

Moving along at his usual pace, we will now hear from President Beddingfield.

MESSAGE OF THE PRESIDENT

PRESIDENT BEDDINGFIELD: Thank you, Dr. Davis.

Mr. Speaker, Past Presidents, Fellow Officers, Guests, Members of the House:

Custom and tradition dictate that at this annual

session, you are to suffer through two Presidential Addresses. The first of these here today is somewhat a report to you of my stewardship as your chief elected officer during the past twelve months, to be largely a factual accounting.

On Tuesday, custom allows me to wax a bit more philosophical.

I suppose every President approaching the end of his term feels constrained to report "This has been an exceedingly busy year!"

I'm no exception. This year has been no exception.

The Presidency of this Society is a demanding job.

Correspondence and phone communications require an average of four hours daily, in addition to the traveling, meetings and conferences and so forth that are involved.

This is not a complaint! I've enjoyed every day of it, although some days more than others! [Laughter]

However, you have been exceedingly wise in limiting this term of office to one year.

During the past year, I have made a studied attempt to diminish the customary out-of-state travel of the President and to increase travel and contacts within the state, both with local and district medical societies, hospital groups, related professional groups, academic institutions and with lay groups.

With this goal, I have been into every corner of the state in most areas on multiple occasions. This has been personally rewarding to me and I hope it has been of some benefit and value to the profession.

As I announced in my inaugural remarks last year, I have made an official visit to each of our ten medical districts, to which representatives of every county society were invited to meet and to discuss informally their concerns and problems and at which they were informed of policies and efforts and resources of the Society which might help to meet some of their needs.

It is my belief that this series of meetings provided a useful forum.

I found a great deal of interest in programs of the Society, in some quarters some lack of information regarding our programs that those of us who have been closer to the scene have come to take perhaps for granted.

Emphasis was placed on the fact that ours is a service organization and our resources are available to all our members.

I must confess that I have failed completely to continue the valuable communications tool established by my predecessors in the form of a monthly message in the format of a President's Page in the Journal. This was not due to any disenchantment with the printed word, but it seemed that I was rather constantly preoccupied with putting out fires and staff decisions so that the time just didn't seem to be available for deliberative writing.

I hope the President's Page will reappear as it is worthwhile.

In this brief accounting, I shall not attempt to document all my travels, all my meetings, or all Society activity. The Compiled Reports of the Society committees, the meetings of the Executive Council and

the unusually large number of resolutions and committee recommendations that will command your attention here during the next few days provide eloquent testimony that in spite of scorners, critics and a few battle scars, medicine is alive and well and living vigorously in North Carolina.

There are certain items of major importance not detailed elsewhere that I would like to bring to your attention.

First of all, membership!

In spite of the spirited discussions and sometimes a climate of discontent which we suffered ourselves through eighteen months ago, brought on by the financial arrangements necessitated by our new headquarters building, I'm happy to report that virtually all of the wounds have healed completely. We have suffered no net loss in membership as a result of that experience. The building is rapidly taking shape. The project is adequately funded and we have had less membership attrition than in most ordinary years.

This is another testimonial to the validity of the democratic process—that's spelled with a little "d"!

Next, I would like to mention the progress in our headquarters office reorganization.

Two years ago this House of Delegates adopted a report directing that a management survey study of the operations of our headquarters office be undertaken. The firm of Rothrock, Reynolds & Reynolds, Incorporated, of Miami, was employed, conducted an exhaustive survey which it had been hoped would have been reported to you here one year ago. Unfortunately, the report was not available until just after we left Pinehurst last year when it was delivered in June; first, to the Blue Ribbon Committee No. 1, who had initiated the project.

This committee, after reviewing the report and its recommendations, turned it over to me and I deemed it of sufficient importance to call an all-day session of the Executive Council meeting in Greensboro in closed door executive session last August to consider the report.

Most of the recommendations were accepted and their implementation directed by the Council. These involved considerable changes in office procedures, realignment of personnel, shifting of responsibilities, job titles and so forth.

Many of these changes have been accomplished and although major changes are not ever accomplished painlessly, the overall effect has been good and it has led to an increased efficiency in our headquarters operations.

Some of the consultant's recommendations which have been accepted in principle by the Council, have been deferred in their implementation, awaiting such events as completion of the new building or the accommodation into existing budgetary limitations.

Thus, it will be several years before the total impact of your action of two years ago can be correctly assessed. In my judgment, such an assessment will reveal that much good has been accomplished.

I'd like to say a few words about Medicaid.

It's currently fashionable for everyone to attack Medicaid—doctors, critics of doctors, governmental officials, politicians, newspapers, all attack the program, but from varying points of view.

Suddenly there are imperfections, some of them glaring and gross imperfections and improvements could and should be made.

Here, in North Carolina, various logistic difficulties produced problems in the early days of the program. These related to difficulties of claim forms, determining eligibility, inept phrases used by social services in initially informing eligible people about benefits in the program and so forth.

Although much of this has been resolved, the memory lingers on!

Yet, with all of this, there is much to be said for the basic concept of Medicaid. It does provide a very large measure of health care for 350,000 needy persons in our state, under circumstances which when viewed fairly and objectively most physicians will ultimately not find seriously objectionable.

Unlike Medicare and various proposed schemes of national health insurance, it does limit the use of government fund to those with an established need.

I would urge each of you to view the program in our state unemotionally, as objectively as possible, offer suggestions for improvement and try to make the system work. Emotionally inspired condemnation and non-participation do not help the needy nor our profession, nor will it result in any better governmental program that you might find more acceptable.

I will have an additional remark to make about that part of the Medicaid program that I am seriously concerned about when I give you the report of Executive Council a little later today.

A brief word about Medicare!

Changes in the Medicare program apparently are going to occur shortly if the recommendations of the Ways and Means Committee of the House of Representatives are accepted by the Congress. Certainly, some changes are in order, but I'm not certain whether we will find the changes Congress might consider this year, improvements or not.

I would simply say we probably receive more letters of frustration and more letters of complaint about this program in increasing numbers, than any of the programs which the Medical Society tries to help counsel its members.

It appears to me that the sequence of events is something like this: the program was grossly and almost by design it seems, under-funded and over-promised.

Proponents of Medicare were told loud and clear by medicine from this state and from other states that the program was going to prove extraordinarily costly. It has and this has not been due, in the main part, to increases in physician fees.

The costs have risen. Medicine has borne the brunt of the blame. Congress has become seriously concerned about this and, almost in a panic-like reaction, they have tightened the screw on the Social Security Administration, which in turn has tightened the screw

on the fiscal intermediaries, the insurance carriers, which in turn has tightened the screw down to what is sometimes called the providers of service, we call them physicians.

It appears to me that at the present time, treating patients under Medicare and trying to act responsibly, to give the patient adequate medical care, is almost like playing in a ball game under ground rules in which the ground rules are not revealed to one of the participants. They are revealed to the other participant, but one is playing in the dark.

The ground rules I refer to are guidelines relating to utilization which have been adopted at the direction of Social Security Administration, by the intermediaries.

A physician never knows when he submits a statement for having taken care of a patient whether this is consistent with these guidelines, which change from time to time.

This has led to frustration, led to resentment on the part of the patients, but the resentment is seldom if ever directed towards the planners of the Social Security Administration. It is directed towards the planners of the Social Security Administration. It is directed towards the physician.

We have a very active committee. It's a new committee for the Society, a Committee on Medicare. It has established very good communications with the regional office of Social Security Administration and with the carrier here in North Carolina.

Many of the difficulties which have arisen, we have been able to resolve through these channels of communication. Others we have been unable to resolve because the lesion is beyond Atlanta and beyond High Point. These difficulties will continue to beset us. Obviously some change in this program will occur, but it will take more than a crystal ball to predict what these changes might be.

My advice to practicing physicians in the meantime, is document every instance that you can, instances in which you think that you or the patient have been treated unfairly and send them in to the Medical Society. We have these lines of communication.

You can, of course, make your unhappiness known to the carrier and ask them for reconsideration and oftentimes they have a review mechanism that will help you. I don't believe this is widely advertised to physicians that there is an avenue of appeal.

If this fails and you believe your course is right we would invite you to send this in to the Medical Society headquarters office. We will do what we can under existing regulations, existing laws, existing lines of communication and failing that, we then have a wealth of information to show to our legislators which conceivably might influence future legislation.

I would like to also call particular attention to a development that I deem of ultimate importance here in the State in regard to highway safety.

Several years ago, an idea was born in one of our Medical Society committees, the committee that cooperates with the State Department of Motor Vehicles. Serving on this committee for a good many years

have been representatives from the state agency, Department of Motor Vehicles and from the Highway Patrol.

North Carolina was one of the very first states, if not the first, to completely computerize its drivers' license records and this led to a readily available means of studying drivers' records.

It became apparent to the Department of Motor Vehicles and to the doctors who were working with this advisory committee that there appeared to be a certain group of drivers that was frequently involved in accidents, had medical examinations by our usual parameters that were insufficient in making reasoned judgment on whether such individuals were truly able to drive.

It became apparent that we needed more sophisticated methods of examining some of these patients, including psychiatric, psychologic examinations, social interviews, etcetera.

So the idea was born within the committee for the possibility of a center for studying and doing research on the problem driver. This idea floated around with Colonel Speed, the former Commander of Highway Patrol and now with the Governor's Highway Safety Program, who mentioned this whenever he could get a soap box and it began to attract a little more attention and this has culminated in a proposal which is approaching reality for such a center to be constructed in the Research Triangle.

Governor Hodges has taken a very keen interest in this project. He has made available a hundred acres of land in the Research Triangle. The entire project will be rather like a consortium head up under the umbrella of Duke University but participated in by Wake Forest and Bowman Gray, North Carolina State University, University of North Carolina at Chapel Hill, State Department of Motor Vehicles, and the State Medical Society committee.

Evidence of support for this project has come from the Governor, from the State Bar Association, and last Sunday down here at Pinehurst, from the North Carolina Automobile Dealers Association, from the Association of Professions and I'm certain I must have left some out—The North Carolina Chapter of American College of Surgeons and other groups.

The funding of this will be primarily through private funds.

I've left out one of the prime supporters of this, the independent insurance, the people who write automobile liability insurance are, of course, vitally interested in this.

They have provided a planning grant several years ago which has carried the project up until this time.

There is now reasonable assurance that substantial funding for the project may come from the major automobile manufacturers and arrangements are underway to have these people talked to in Detroit in the next few weeks.

But this was an idea that was born here in our Society and I believe this is a major cause of disability and death that we can really do something about and

perhaps we can make more of an impact on this than we could on some of our long-term chronic illnesses.

Very briefly, I would like to mention a project which we have barely gotten off the ground. I think it has merit for the Society. I have called this "Project Unity."

The concept is this: One of the reasons as we all know, attendance at State Society meetings is not percentagewise what it used to be here at Pinehurst, is because of the evolutionary changes that have occurred in medicine with specialization, the growth and development of specialty societies and other access to scientific information other than the State meetings which a little over a generation ago was the fountainhead of medical information, here in the State.

I have approached the presidents of all of the specialty societies here in North Carolina and submitted for their consideration, for them taking back to their specialty groups, a proposition something like this:

To urge the specialty societies to assume the responsibility for the scientific programs in their section meetings here in conjunction with the annual meeting in Pinehurst. I believe that this would produce a high calibre section meeting and would increase attendance.

That was what we asked the specialty societies to do for us. What could we do for them?

I offered the specialty societies the opportunity to use on a PRN basis as needed as their organizational demands might require various facilities of the State Society headquarters office.

We are adept, I think, in setting up and organizing meetings, mailings and billings, sending out notices and many of these specialty societies do not have sufficient membership to provide for executive office help. We would be able to gradually absorb some of this function for some of these related organizations over a period of time and I believe that a very useful partnership could develop, letting each group do the thing that it does best.

This proposition, it seemed to me, was warmly received by the heads of the specialty groups and it is now under consideration by at least some of the specialty societies.

I think it would take several years for it to come to full fruition, but I hope that it will be nurtured.

In conclusion, I want to offer my very sincere thanks to the officers who have served with me, members of the Executive Council who have worn out, I'm sure, many chairs if not many pairs of pants at some of our Council meetings. They have been patient and long-suffering. To the staff, who has put up with a lot of eccentricities and odd hours because they haven't been used to the President closing the office every Thursday night.

They have all been very understanding and very forbearing.

To all of the people who have served on the committees as my appointees for the finest work that you have done, much of it insufficiently recognized, but

most of all, thanks to the delegates and to the entire membership of the Society for allowing me to fill this post.

Thank you.

[Whereupon the entire assemblage then accorded President Beddingfield a standing ovation.]

SPEAKER OF THE HOUSE: Thank you, very much, Ed.

This address of course will be referred to the Committee on the President's Addresses, chaired by Dr. John McCain, after he gets it written he says!

At our Sunday afternoon session, one of the more interesting and certainly one of the most attractive features has been a message from our Auxiliary. This afternoon, we're very happy to have with us and to hear from her at this time, the very attractive, efficient and gracious President of the Auxiliary, Mrs. Peggy Crutchfield.

[Whereupon the entire assemblage then accorded the Auxiliary President a standing ovation as she was duly escorted to the podium.]

MESSAGE ON THE AUXILIARY PRESIDENT

MRS. A. J. CRUTCHFIELD [President, Auxiliary to the Medical Society]: Thank you, gentlemen.

Mr. Speaker, Dr. Beddingfield, Dr. Shaffner, Mr. Hilliard, the Executive Council and Delegates of the Medical Society of the State of North Carolina:

It has been my privilege and honor to serve as President of your Auxiliary for the year 1969-1970. I am very grateful to each of you for the support, financial and otherwise, and interest you have accorded the Auxiliary during my term in office. It has been a pleasure to work with you and your wonderful wives.

You have received a copy of your Annual Reports in which there is a report of the work done by the Auxiliary. I will not take time from your busy schedule to review these accomplishments, but I do hope you will read this report at your convenience. I am proud of this record and am sure you will be, also.

In the early spring I had occasion to visit the campus of the University of Alabama. As I am sure most of you in this room are well aware, this is Coach "Bear" Brant country.

While I was there, I was taken on a tour of their very excellent Student Health Facility, of which one of our fine North Carolina physicians is director, Dr. Syd Alexander.

I, also, toured their very plush new field house which houses all the athletic departments as well as a beautiful basketball arena. On the tour of the field house we were shown a small amphitheatre used by the coaches to review movies of their games. On the wall, as you entered the door, was a large framed writing which we were told had been sent to Coach Bryant by the mother of one of his football players. It said so well the way I feel about the work of the Auxiliary that I asked if it was possible to have a copy. Our guide very gladly gave me one which I would like to read to you:

The Price of Success

What is the price of success?

It is simply . . . To use all your courage, to force yourself to concentrate on the problem in hand, to think of it deeply and constantly, to study it from all angles, and to plan. To have a high and sustained determination to put over what you plan to accomplish, but in spite of all adverse circumstances which may arise—and nothing worthwhile has ever been accomplished without some obstacle overcome. To refuse to believe that there are any circumstances sufficiently strong to defeat you in the accomplishment of your purpose. Hard? I should say! That is why so many men never attempt to acquire success. They answer the siren call of the rut and remain on the beaten path for beaten men. Nothing has ever been achieved without constant endeavors, some pain and constant application of the lash of ambition.

That's the price of success.

Every man should ask himself: Am I willing to endure the pain of this struggle for the comforts and the rewards and the glory that go with accomplishment? Or, shall I accept the uneasy and inadequate contentment that comes with mediocrity?

Am I willing to pay the price of success?

I think the North Carolina Auxiliary members have shown that they are willing to pay the price of success this year.

Thank you for allowing me the privilege of appearing before you today.

[Applause]

SPEAKER OF THE HOUSE: Peggy, thank you, very much, and I hope you and all the Auxiliary know how grateful we all are to you for your continued good work. Thank you.

I will remind you of the fact that she brought out that her complete report is published in the Compilation of Reports in your packet.

VICE SPEAKER OF THE HOUSE (Dr. Chalmers Carr): Mr. Speaker, Mr. President, Members of the House:

It befalls my pleasant duty to conduct a couple of items of business for you this afternoon as my first official function in this understudy job. It's a pleasure to back up my old shipmate Jim Davis and I hope that between us we can see that all of the aspirations he has for fair play and so forth are carried out.

We will first turn our attention to the Annual Compilation of Reports. These annual reports are published. They're in your hands. There may be additional addenda or remarks that are desired to be made. I know of a few that will come up.

Is there any additional report from the Constitutional Secretary?

DR. CHARLES W. STYRON [Constitutional Secretary of the Society]: Mr. Chairman, Members of the House of Delegates:

It has been my privilege to serve as your Constitutional Secretary for a period of nine years, during which time I have observed the administrations of

nine very excellent administrative officers and presidents. It has been a great pleasure to serve under these men, who in my opinion have all done an excellent job, culminating in the administration of Ed. Beddingfield in a very difficult year which required energy, courage and a willingness to give himself totally to the job.

It has been a real pleasure to serve as your Secretary during this time and particularly, Ed, during this past year. I've seen you operate under difficult circumstances well.

The report of the Constitutional Secretary is in the Compilation. It speaks for itself and I have no additional remarks to make.

[Applause]

VICE SPEAKER OF THE HOUSE: During the year, the office of Executive Vice President has been established and part of the work has been shared by the Executive Vice President and Executive Director. Their reports are in the Compilation.

Is there any additional report at this time from the Executive Vice President, Mr. Barnes?

MR. JAMES T. BARNES [Executive Vice President of the Society]: No, sir.

VICE SPEAKER OF THE HOUSE: Mr. Barnes has no additional report at this time.

Is there any additional report from the Executive Director, Mr. Hilliard?

MR. WILLIAM N. HILLIARD [Executive Director of the Society]: No, sir, no additional report.

VICE SPEAKER OF THE HOUSE: I would now like to call on the Councilors and recognize the Councilors and if they have additional reports, we will hear from them in turn.

[Each Councilor in turn, when called, indicated no additional report, except that the Councilor for the Seventh District indicated that his report was received too late for including in the compilation of Annual Reports. See page 58, Additional Reports.]

VICE SPEAKER OF THE HOUSE: Now we will turn to report of Commissioners. I think there are one or two additional Commission reports to be had.

[The Chairmen of Commissions I, II, V, VI and VII, when called, indicated no additional report.]

VICE SPEAKER OF THE HOUSE: Dr. Williams, Commission III, I believe you have a word. Would you take the microphone.

DR. LYNWOOD E. WILLIAMS [Chairman, Commission III]:

Mr. Speaker, in addition to the report that is listed in the Compilation, I have a last minute bit of information that I think the membership and House should know.

As you go through the scientific exhibits out the door, you may notice we're not quite in order for full exhibiting.

This is in no way the fault of the Committee on Scientific Exhibits, nor the headquarters staff, Mr. Hilliard, or anyone else. There's a truck strike at Chicago.

Two of the AMA exhibits that Dr. Newell had so ably recruited for us won't be here. Some of the others

are delayed and we hope by tomorrow we will be in much better shape, so if you see any empty exhibit spaces, just remember, it's nobody's fault. It's unavoidable.

I have no additional report. Thank you.

VICE SPEAKER OF THE HOUSE: Thank you, Commissioner Williams. It's distressing that this happened. I had it happen to me a few years ago when an exhibit got as far as St. Louis and never made San Francisco for the same reason. It's very embarrassing to the exhibitors, so bear with them and don't blame them for the fact that their exhibit didn't arrive.

Dr. Phillips, Commission IV!

DR. CHARLES A. S. PHILLIPS (Chairman, Commission IV):

Mr. Chairman, I have one additional report received after the printing of the Compilation from the Committee Physical and Vocational Rehabilitation, Dr. Edwin H. Martinat, Chairman. (See page 58. Additional Reports.)

VICE SPEAKER OF THE HOUSE: We will now be happy and privileged to hear from any member of the AMA Delegates, our delegates to the AMA, and we'll call on Dr. Amos Johnson, who is the senior delegate first for any report or remarks.

DR. AMOS N. JOHNSON [AMA Delegate of the Society]:

Mr. Speaker, Dr. Beddingfield, Members of the House of Delegates:

Speaking for your four delegates to the American Medical Association, Dr. Donald Koonce, Dr. Frank Jones, Dr. David Welton and for myself, and speaking also for the alternate delegates, Dr. Jim Davis, Dr. D. E. Ward, Dr. John Glasson and Dr. Beddingfield, I say we have very little of immense interest to report to you about the business of the American Medical Association at the present time.

We have one interesting and rather unique situation which will be coming up in Chicago this June. We have four candidates for the office of President-elect of the American Medical Association, Dr. Robert Long from Kentucky, Dr. Jerry Annis from Florida, Dr. Irvin Hendryson from New Mexico and Dr. Wesley Hall from Nevada. I think that this is a healthy situation and I hope that in the future we will continue to have several people who have the ability and capacity and aspirations to become President of the American Medical Association.

The only other thing that I would bring to your attention is that there will be discussed in some detail before the House of Delegates here and before a special ad hoc Reference Committee, a report from the Committee on Planning and Development of the House of Delegates of the American Medical Association, which report was submitted through the Board of Trustees as Report I at the meeting last December, which has quite a bit of importance and quite a bit of bearing on the future policies of the American Medical Association.

This report was sent specifically to each of the component state medical societies which comprise the

American Medical Association membership with the request that the report should be carefully studied and that recommendations from each state medical society be sent back to the House of Delegates of the American Medical Association.

I hope that all of you will attend and be conversant with and will talk to this report at the special ad hoc committee meeting which we will have here in due process.

Thank you, very much, Mr. Speaker, for this opportunity.

VICE SPEAKER OF THE HOUSE: Thank you, sir.

As all are Past Presidents they have the privilege of the floor in any event. Does any other delegate have an additional remark to make?

[No response]

If not, we will pass on to related organizations which is the catch-all for those who are not listed. I know of one report that we're very interested to hear and if there are others, I've not been informed.

If there are other reports to be made at this time, which have been overlooked, if you will let me know now, while the next speaker has the floor, I'll be glad to entertain such reports.

I'm going to call on for a few minutes, Dr. Roscoe MacMillan, of the Auxiliary and Archives Committee.

Dr. MacMillan I am told, I should have known, was the one hundredth president of this Society. He is a Past President and distinguished physician from Red Springs and I'm sure that no one in this Society is as aware as he is of the medical history of the Medical Society of the State of North Carolina.

Dr. MacMillan!

DR. ROSCOE D. McMILLAN [Chairman, Committee on Auxiliary and Archives of History]: Mr. Speaker, Dr. Beddingfield and Gentlemen:

I know this report is in the Compilation of Reports. This is such an important thing to me. I have been working on this history of the Medical Society for the past fourteen years and I thought by this time I would have this completed and report it to the House of Delegates.

It is completed with the exception of one manuscript and I sort of hoped I'd get that by noon today, but I will have it now pretty soon.

My point in coming before you today is that I want the House of Delegates to know that this history of the Medical Society of the State of North Carolina is almost ready to go to the publisher.

It's going to be in three volumes. I can't tell you exactly how much it's going to cost. They will not give me a definite cost until they get all the manuscripts in and the University of North Carolina Press moved their meeting up one week, but of course I didn't get it and their next meeting is in October, but I promise you that we'll have the manuscript by that time or we'll go to press without it. It's a very important manuscript and I do hate so much to go without it.

Now, what I did want to talk to you about though is the cost.

It will probably range between \$35,000 and \$40,000

and of this \$40,000 which I put at the top, I'm hoping that at least 300 libraries throughout the state, including the University medical libraries and private libraries will subscribe to it and I would hope that a thousand doctors throughout the state of the five thousand members of the State Medical Society will purchase this and that will bring up to \$39,000 if that happens.

I've been a little disappointed in some people saying, "You'll never sell a thousand". Folks, I want you to go back in your community from this meeting and tell them they must buy! We've got to have that \$40,000!

I want you to be my ambassador and tell them what a wonderful work this is.

I've had thirty sub-editors on this and they've all done a lot of work for us and I wish I had time to tell you a little bit more about it, but I do want you folks to help me out to sell this History of the Medical Society of the State of North Carolina before the 1971 meeting of the Medical Society of the State of North Carolina.

Thank you. [Applause]

VICE SPEAKER OF THE HOUSE: Thank you, Dr. McMillan.

I'm sure that with the zeal that you've put into this in preparing it, the zeal that you sell it, that you'll have no great difficulty in selling your book and even snake oil to the Indians!

Are there any other additional reports that have not been handed to the Chair?

[No response]

If not, I'll entertain a motion to accept this body of reports we just now received.

DR. STYRON: So moved.

VICE SPEAKER OF THE HOUSE: Is there a second?

DR. FRANK W. JONES: Second.

VICE SPEAKER OF THE HOUSE: Any debate?

[No response]

All in favor of acceptance of the reports signify by "a'ye"; opposed same fashion.

Hearing none, the reports are declared accepted to become part of the archives of the Society.

Our next duty is to introduce to you the Chairman of the Committee on Constitution and By-Laws, Dr. Henry Carr, no kin, of Clinton!

Dr. Carr!

DR. HENRY J. CARR, Jr. [Chairman, Committee on Constitution and By-Laws]: Mr. Speaker, Mr. Vice Speaker, Mr. President, Members of the House of Delegates:

The report of the Committee on Constitution and By-Laws, the light yellow sheets in the green delegates' packet you received, was approved by the Executive Council at its annual meeting yesterday, May 16th, 1970.

Please note the items referred to as Articles pertain to the Constitution and the items referred to as Chapters pertain to the By-Laws.

Items 2, 4-A, 4-B, 4-C, 4-D, 4-E, 4-F, 5-A and 6 relate

to Constitutional changes.

Items 1, 3, 4-G, 5-B and 7 pertain to By-Laws.

All By-Law changes that are related to or contingent upon Constitutional changes will not become effective until final approval of the related Constitutional changes is obtained.

There have been minor grammatical and other clarifying changes made in this report and approved by the Executive Council. These changes will be pointed out to delegates as we proceed through the report.

The proposed changes are as follows:

1. Relating to Commissioners having voting status on the Executive Council. This can be accomplished by the following:

Page 24 Chapter IV entitled "The Executive Council", Section 1, line 3:

delete "and" after "delegates" and add a comma after "Vice Councilors" and then add the phrase, "and the Chairman of each Commission provided for in the By-Laws".

The sentence would then read as follows:

The President, the President-elect, Vice Presidents, Secretary, the immediate Past President, the Speaker and the Vice Speaker of the House of Delegates, the ten Councilors or Vice Councilors, and the Chairman of each Commission provided for in the By-Laws, shall constitute the Executive Council of which the President of this Society shall be President and the Secretary shall be Secretary.

Item 2 requires no legislative action.

Item 3 pertains to the flexibility of the Society in dealing with the dues of members who are severely disabled with greatly reduced incomes but who are not, in fact, totally disabled.

Now, this can be accomplished by the following:

Page 45, Chapter XII entitled "Assessments and Expenditures", Section 1, last sentence:

This sentence should be changed to read:

The Executive Council may exempt any member from the payment of partial or total dues and assessments who, in its opinion, should be relieved of such payment by reason of his personal circumstances.

Now, that proposed amendment contains a grammatical correction, as well as the person we discussed.

Item 4 is regarding suggestions made by the ad hoc Committee on Tenure of Office with regard to certain offices in the Society. These suggestions have been approved by the Executive Council and are now submitted for formal action by the House of Delegates.

These suggestions can be accomplished by the following:

A. Constitutional Secretary.

Page 6, Article VIII entitled "Officers", Section 2, after the third paragraph and line 8, insert another paragraph to be line 9 and to read as follows:

The Constitutional Secretary shall be elected to not more than two consecutive terms . . .

Item 4-B regarding the Speaker of the House of

Delegates. On page 6, Chapter VIII, Officers, Section 2, after line 2, first sentence, insert a second sentence to read as follows:

The Speaker of the House of Delegates shall be elected to not more than three consecutive terms.

Item 4-C pertains to the Vice Speaker of the House of Delegates. Page 6, Article VIII, Officers, Section 2, add a second new sentence to follow proposed sentence in 4-B above, the sentence to read as follows:

The Vice Speaker of the House of Delegates shall be elected to not more than three consecutive terms.

Item 4-D regarding the North Carolina Board of Medical Examiners, on page 7.

Article IX, The Board of Medical Examiners, Section 1, line 7, add a new sentence to read as follows:

Members of the Board of Medical Examiners of the State of North Carolina shall be elected to not more than one six year term, provided, however, that a member who has served as Secretary for a full term of six years may be elected for an additional six year term.

Item 4-E pertains to North Carolina State Board of Health on page 7.

Article IX, The State Board of Health, Section 2, line 4 add new sentences to read as follows:

The elected members of the North Carolina State Board of Health shall be elected by the House of Delegates to not more than two consecutive terms. The terms of the elected members of the State Board of Health shall be staggered such that two members shall be elected every two years.

Item 4-F pertains to the Editorial Board of the North Carolina Medical Journal. On page 8 Article IX, Editorial Board of North Carolina Medical Journal, Section 3, add a new sentence to the first paragraph on line 5 to read as follows:

The elected members of the Editorial Board of the North Carolina Medical Journal shall be elected to not more than two consecutive terms.

Just a small grammatical change there.

Item 4-G pertains to Medical Care Commission and Board of Trustees of North Carolina Blue Cross and Blue Shield, Inc.

On page 16, Chapter IV, House of Delegates, Section 14 line 9, add new sentences after "from the floor" to read as follows:

The elected members from the Medical Society of the State of North Carolina to the North Carolina Medical Care Commission shall be elected to not more than two consecutive four year terms.

The elected members from the Medical Society of the State of North Carolina to the Board of Trustees of North Carolina Blue Cross and Blue Shield, Inc., shall be elected to not more than two consecutive four year terms.

Also, change a final sentence in the same paragraph (page 16, Section 14) to read as follows:

Members may be elected to succeed themselves except as otherwise specifically limited by the Constitution and By-Laws.

Item 5, proposed changes in Student Membership.

On page 2, Article IV, Membership of the Society, Section 3, Student Members, change the paragraph to read as follows and this contains a correction for clarification:

Any student who is regularly enrolled as a candidate for the degree of Doctor of Medicine in a school in the State of North Carolina, and who is an active member of his local Student American Medical Association Chapter, shall be eligible for Student Membership. This membership may be obtained through application to the Executive Office of the Society on a form provided for this purpose and election by majority vote of the Executive Council. Student Members shall pay dues as periodically determined by the Executive Council, shall receive the North Carolina Medical Journal, and shall enjoy all the rights and privileges of membership in the Society.

Item 5-B amending the By-Laws, Chapter IV, House of Delegates, page 12, Section 2, line 6, add after "major fraction of twenty-five voting members" a new sentence to read as follows:

The Student Members of the Medical Society of the State of North Carolina from each medical school in the State of North Carolina shall be entitled to one delegate for the first twenty-five student members or less, and an additional delegate for each additional twenty-five student members or any additional major fraction of twenty-five student members.

Also, Chapter IV, House of Delegates, page 13, Section 2, line 5, after "of the component county medical society" add a comma and the following phrase:

. . . or in the case of student delegates by the Chief Executive Officer (or his designee) of each medical school in the State of North Carolina.

Then, the sentence will read as follows:

A list of such delegates shall be officially certified by the Secretary of the component county medical society, or in the case of student delegates by the Chief Executive Officer (or his designee) of each medical school in the State of North Carolina, to the Executive Director of this Society on forms furnished by the Secretary of this Society, who shall issue official certificate to the delegate.

Also, page 13, Section 2, line 11, after "hyphenated society" add a comma and the following phrase:

. . . or in the case of student delegates, the delegate may designate some other student member from his medical school . . .

Then, the sentence will read as follows:

If neither the delegate nor the alternate delegate is able to attend the meeting of the House of Delegates, the delegate may designate some other member of his hyphenated society, or in the case of student delegates, the delegate may designate some other student member from his medical school to attend the sessions of the House of Delegates.

Also, on page 13, Section 2, line 13, after "he represents", add a new sentence to read as follows and this contains a grammatical correction but there is no change in the meaning:

Every student delegate shall be a medical student in good standing at his medical school and a student member in good standing in the Medical Society of the State of North Carolina at the time of his admission to the House of Delegates.

Item 6, regarding changes in the House of Delegates structure to include Student Delegates.

Page 5, Article V, House of Delegates, line 3 after "societies" omit comma and add "and delegates elected by student Members. Then the paragraph will read:

The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) delegates elected by the component county societies and delegates elected by Student Members and (2) ex officio the Past President and Past Secretaries and the officers of the Society as defined in this Constitution.

Item 7, Amend Chapter XV, Section 5, page 48, line 4 by deleting the last sentence. The sentence now reads as follows:

No physician shall be admitted to this Society between a date following ten days after the Annual Meeting of the Society and the date of the next Annual Meeting of the Society except by special action of the Council.

There is one additional item that is not included in the material previously sent to all the delegates and officials in the green packet. This proposed amendment originated in and was approved by the Executive Council at its Annual Meeting yesterday and is now submitted to the House of Delegates for further action.

This amendment pertains to the time interval required for resolutions to be filed with the Executive Director of the Society in advance of the first meeting of the House of Delegates.

The requested time change is from fourteen days to thirty days. This can be accomplished by the following.

Amend Chapter IV Section 18, page 17 of the By-Laws by deleting the word "fourteen" in line 3 and inserting in lieu thereof the word "thirty". The section would then read as follows:

No resolution shall be considered or voted upon by the House of Delegates unless the resolution has been filed with the Executive Director of the Society at least thirty days before the first meeting of the House of Delegates, except upon vote of two-thirds of the members present at the meeting of the House of Delegates or upon reference to the House of Delegates by the Executive Council.

Mr. Vice Speaker, this completes the report of the Committee on Constitution and By-Laws.

VICE SPEAKER OF THE HOUSE: Thank you, very much, Dr. Carr, for the excellent report. Because of the depth and impact of some of these proposed Constitutional and By-Law changes, it is the judgment of the Speaker and the Vice Speaker that this whole matter be referred to Reference Committee II, said committee meeting Monday afternoon at two o'clock so there may be a free exchange of ideas and opinions and proposals by the Reference Committee, to be reported at

the meeting of the House on Tuesday afternoon.

As stated, of course, the By-Laws that are contingent upon Constitutional changes will have to be held over, but the other By-Law changes may be ratified or not ratified at that time.

It is so ruled that this be referred to Reference Committee II.

SPEAKER OF THE HOUSE (Dr. James E. Davis): Thank you, very much, Dr. Carr for an excellent job.

I've been told that Mr. William Henderson, Executive Secretary of the North Carolina Medical Care Commission is with us. I'd like to recognize him and extend a warm welcome to him.

Bill, we're delighted to have you with us.

[Whereupon] Mr. William Henderson, Executive Secretary, North Carolina Medical Care Commission, stood up to be recognized.] [Applause]

The House is now ready to receive nominations and I would like to remind you that seconds to nominations are not necessary. In the interest of time, I will ask you to refrain from them.

Since there is a possibility that we will have written ballots, I would like now to appoint tellers to supervise the balloting if it's necessary and I've asked Dr. Frank Jones to serve as Chief Teller and will ask to serve with him Dr. Thornton Cleek, Dr. Henry Cutchin, Dr. J. B. Warren and Dr. John Watson.

Now, as you'll recall, our Constitution and By-Laws require that the Nominating Committee shall make its report at least two weeks before the Annual Meeting to the President of the Society in a sealed, confidential letter and I will now recognize at this time President Beddingfield.

PRESIDENT BEDDINGFIELD: Mr. Speaker, I hold in my hand an envelope, postmarked from Buies Creek North Carolina, April 13th, by certified mail and inside that envelope was a second envelope with a message from the Chairman of the Nominating Committee saying "Keep your cotton-picking hands off this!" [Laughter]

I'll now apply the "cotton-picking hand"!

I bring to light a document dated April 1, 1970 from Dr. Bruce Blackmon, Chairman, Nominating Committee, entitled, Report of the Nominating Committee of the Medical Society of the State of North Carolina.

The nominees are:

For President: Dr. Louis Shaffner, Winston-Salem;

For President-Elect: Dr. Charles Styron, Raleigh;

For First Vice President: Dr. George Gilbert, Asheville;

For Second Vice President: Dr. James Jones, Jacksonville;

For Secretary: Dr. E. Harvey Estes, Durham;

For Speaker of the House: Dr. James E. Davis, Durham;

For Vice Speaker of the House: Dr. Chalmers Carr, Charlotte;

The nominees for Councilors and Vice Councilors of their respective districts are as follows:

District One Councilor: Dr. Edward Griffith Bond, Edenton;

Vice Councilor: Dr. Joseph Armstrong Gill, Elizabeth City.

District Two Councilor: Dr. Ben Warren, New Bern;

Vice Councilor: Dr. Emil Charles Beyer, Newport.

District Three Councilor: Dr. Frank Reynolds, Wilmington;

Vice Councilor: Dr. Thomas Marshburn, Wilmington.

District Four Councilor: Dr. Harry Weathers, Roanoke Rapids;

Vice Councilor: Dr. Robert Shackelford, Mount Olive.

District Five Councilor: Dr. D. E. Ward, Lumberton;

Vice Councilor: Dr. H. David Bruton, Southern Pines.

District Six Councilor: Dr. Thomas Worth, Raleigh;

Vice Councilor: Dr. John Watson, Oxford.

District Seven Councilor: Dr. Charles Stuckey, Charlotte;

Vice Councilor: Dr. Jesse Caldwell, Gastonia;

District Eight Councilor: Dr. Thornton R. Cleek; Asheboro;

Vice Councilor: Dr. Ernest B. Spangler, Greensboro.

District Nine Councilor: Dr. Henry Cutchin, Sherrills Ford;

Vice Councilor: Dr. Vern Blackwelder, Lenoir.

District Ten Councilor: Dr. Robert Crouch, Asheville;

Vice Councilor: Dr. Kenneth Cosgrove, Hendersonville.

This completes the list of nominations for officers of the Society.

[See page 105 for additional information concerning staggered terms of Councilors.]

SPEAKER OF THE HOUSE: Thank you, Mr. President.

Dr. Blackmon, may we have confirmation that the nominee for Vice Councilor from the Seventh District is Dr. Jesse Caldwell?

DR. BRUCE BLACKMON [Chairman, Nominating Committee]: Yes, sir.

SPEAKER OF THE HOUSE: Thank you.

If there's no objection from the House, I would like to handle the election of the officers separately from the election of the non-officers which list of nominees you already have.

I would now ask for a motion to accept the report of the Nominating Committee.

[The motion was made from the floor.]

Is there a second?

[The motion was seconded from the floor.]

It has been moved and seconded that the report of the Nominating Committee be accepted.

All those in favor please say "aye"; opposed "no".

The report is accepted and the floor is now open for other nominations.

[The Speaker of the House then called for nomination from the floor for President, President-elect, and in turn each of the other offices enumerated above in the report of the Committee on Nominations; there being no response from the floor as additional nominations for each respective office were called for.]

Are there other nominations for any of these offices?

[No response]

If not, I would entertain a motion that these nominees be elected.

[The motion was made and seconded from the floor.]

All those favoring the motion, please say "aye"; opposed "no".

The slate is elected.

[Applause]

As you will recall because of recent changes in our by-laws, the Nominating Committee is also required to submit the nominations for all the elective positions other than the officers of the Society, to be announced to the delegates in writing at least thirty days in advance of the Annual Meeting.

All of you have received this list of nominations and I'll now recognize Dr. Bruce Blackmon, Chairman of the Nominating Committee, to enter these nominations.

Dr. Blackmon!

DR. BLACKMON: Thank you, Mr. Speaker.

Mr. President, Members of the Group in general:

I want to express my appreciation to the Nominating Committee for the time and effort that they put forth in this compilation. These men have been very generous with their time for organized medicine in North Carolina.

I'm grateful, sir, that our Constitution limits the amount of time a man can serve on this committee.

We present to you, the Delegates to the AMA:

Dr. Donald B. Koonce, Dr. Frank Jones,

For alternate delegates to the AMA:

And, these are not in any particular position.

Dr. James Davis of Durham, Dr. D. E. Ward of Lumberton.

To the North Carolina Board of Medical Examiners:

Dr. William Sprunt, Dr. Jimmie Dale Simmons of Mt. Airy.

To the North Carolina Board of Health:

No vacancy.

To the North Carolina Medical Care Commission:

Dr. Hugh F. McManus, Jr., of Raleigh.

To the Editorial Board of North Carolina Medical Journal:

Dr. William J. Cromartie, Chapel Hill and Dr. Robert W. Prichard of Winston-Salem.

To the Board of Trustees, Blue Cross and Blue Shield, Inc.:

Dr. Roy S. Bigham, Charlotte; Dr. Robert P. Crouch, Asheville.

To the Medical Society of the State of North Carolina Committee on Retirement Savings:

Dr. Hewitt Rose, Jr., Raleigh and Dr. John C. Foushee, Sanford.

Now we come to the Committee on Blue Shield which is a newly constituted committee and I remind you that the work of the Nominating Committee this time turned out to be more a matter of systematizing and organizing your suggestions than it was purely of nominations.

Letters went out to the presidents and secretaries of each county society asking for suggestions. Letters went out to the president of each specialty group and

later to the presidents of the active districts in the Society.

I read to you from your Constitution the requirements of your Blue Shield Committee, a portion of that, Section 16, page 39:

Beginning in 1970 a Committee on Blue Shield consisting of 26 members shall be initially elected by the House of Delegates; 8 members for one year, 8 members for two years and 10 members for three years so that in the first year there will be two members from different medical districts and with different terms of office representing each of the major practice specialties—

And, then your thirteen specialties are listed.

With that in mind, your Nominating Committee submitted the second sheet.

For Surgery: Dr. S. G. Jenkins and the Roman numerals in parentheses are the Districts these men are from, number one.

Dr. James Davis, number six.

Internal Medicine: Dr. Hoke Bullard; Dr. Otis Michael.

Obstetrics and Gynecology: Dr. Kenneth Podger and Dr. John Ashe.

Pediatrics: Dr. Dewitt Trivette and Dr. Mary M. McLeod.

Ophthalmology and Otolaryngology: Dr. Richard Sherrill and Dr. William Hudson.

General Practice: Dr. Ray Israel, and Dr. David Whitaker.

Neurology and Psychiatry: Dr. Paul Donner and Dr. Charles Vernon.

Radiology: Dr. William Bell and Dr. A. B. Croom.

Pathology: Dr. James Maher and Dr. Luther Oehlbeck.

Anesthesiology: Dr. John R. Hoskins, Dr. John C. Doerr.

Orthopedics: Dr. John Glasson, Dr. John Wooten.

Dermatology: Dr. Howard Steiger, Dr. Harry Van Velsor.

Public Health and Education: Dr. Caroline Calison, Dr. M. B. Bethel.

SPEAKER OF THE HOUSE: Thank you, Dr. Blackmon.

May I please have a motion that this report of the Nominating Committee be accepted.

[The motion was made from the floor.]

Is there a second?

[The motion was seconded from the floor.]

All those in favor please say "aye"; all opposed "no".

This slate is then entered in nomination and the floor is now open for other nominations.

[The Speaker of the House then called for nominations from the floor for delegates and alternate delegates to the American Medical Association, with no response.]

Are there other nominations for the North Carolina Board of Medical Examiners?

Yes, sir, would you identify yourself?

DR. EDGAR L. JAMISON: E. L. Jamison of Ashboro!

I would like to place in nomination the name of Dr. Frank Edmundson who has served the past eight years as a member of the State Board of Medical Examiners who is now President-elect of the National Federation of Medical Examiners.

In order to add more prestige to his office of the National Federation I would like to place his name in nomination.

SPEAKER OF THE HOUSE: Thank you, sir.

The name of Dr. Frank Edmundson has been entered in nomination as a member of the Board of Medical Examiners.

Are there other nominations for this office?

[No response]

[The Speaker of the House then called for nominations from the floor for each of the respective remaining positions listed above by the Committee on Nominations without response from the floor.]

Are there other nominations for any of these listed offices?

[No response]

As you'll recall, our Constitution and By-Laws do allow, as we've just done, a voice vote for an uncontested office. With your permission, I will follow this procedure on the uncontested offices and entertain a motion that those nominated and uncontested nominees be elected to office.

[The motion was made from the floor.]

Is there a second?

[The motion was seconded from the floor.]

It has been moved and seconded that those uncontested nominees be elected to the office for which they have been nominated.

Those favoring the motion, please say "aye"; opposed "no".

So we have elected this slate except for two members to the North Carolina Board of Medical Examiners of which there are three nominations. Again these and Dr. William Sprunt, Dr. Jimmie Dale Simmons and Dr. Frank Edmundson.

We will now prepare for a written ballot.

Dr. Baker!

DR. LENOX BAKER [Past President of the Society]:

Mr. Speaker, I rise for a word of information.

SPEAKER OF THE HOUSE: Would you come to the center microphone please!

DR. BAKER: I don't rise to give information, but I rise to ask information in regard to this because it is so seldom that we ever have a nomination from the floor, but it's my understanding and maybe the man who put his name in nomination could give us the information—maybe everybody knows it. I don't know it until a moment ago—but perhaps he'd asked not to go back on the Board before he'd been made President-elect of the National Federation of Medical Examiners and now he could come in too late for us to act.

Perhaps someone who knows the inside story of this, could tell us—I didn't know this until a moment ago—did the man ask to go back on because now he's putting the situation a little farther because of the

time element of the House to be nominated from the floor?

If so, I think we should know that.

SPEAKER OF THE HOUSE: Would anyone like to respond to Dr. Baker's question?

DR. JAMISON: Since Dr. Edmundson has been made President-elect of the National Federation, in order for him to have a home base to work from, it was felt by the Randolph County Medical Society that his name should be placed in nomination to continue on the North Carolina Board of Medical Examiners, with his permission.

SPEAKER OF THE HOUSE: Thank you.

Did everyone hear that his name is placed in nomination with his permission, which I think is what Dr. Baker was asking?

Is there further discussion of the nomination?

[No response]

If not, we will now prepare to ballot and I'll ask Dr. Jones as Chief Teller to come forward with his group of tellers and pass out the ballots.

We will vote for two, please and although it's not required that we vote for two, certainly this is a democratic thing to do and we would stress that you vote for two of these men if at all possible.

DR. LOUIS deS. SHAFFNER [President-elect of the Society]: Mr. Speaker, those delegates who want to vote had better come down to the floor.

SPEAKER OF THE HOUSE: Yes, if there are any delegates who are not seated in the well of the hall, if you would like to vote you will have to be seated in the proper place.

[Balloting followed.]

If it's not clear, there are official ballots so please wait for one. The tellers will give you one.

Is there anyone now who's entitled to vote who has not received a ballot?

[No response]

If you've completed your ballot, would the tellers please begin at the back and work forward and collect the ballots, please.

[Collection of ballots followed.]

If the ballots are all collected, the tellers will retire from the room and we will continue with our agenda which is still rather lengthy.

[See page , for results of the balloting for members elected to the Board of Medical Examiners.]

I think that by now all of you have received, as delegates, a copy of the Constitution and By-Laws. I hope you have already familiarized yourselves with it and I hope that you will keep it at hand at home to refer to matters concerning the Medical Society.

You will find in there that the House of Delegates by constitutional statement is a legislative and the business body of the Society, except for questions of an ethical nature or those involving a controversy between component county societies or controversies between members. All other business has to come before this House of Delegates.

I think that at times all of us feel that the real authority and the work of the Society is done by the

officers of the Executive Council. I would like to re-emphasize to you the fact that this body, that you as the House of Delegates, of some 3600 physicians in the State, have the ultimate control of this Medical Society.

I'm afraid that during a lengthy Sunday and Tuesday afternoon, we sometimes get the feeling that we are delegating the real action to other parts of the Society.

I would like to reemphasize that the power is yours. Our decisions are binding and I hope that we will take them in all seriousness.

I think it was in the spirit that I've just outlined that your previous Speaker suggested that the incumbent Speaker assume as one of his responsibilities a report to the House on the action which has taken place in the intervening year since the previous meeting of the House of Delegates, on your decisions a year ago.

So, if you will bear with me, I will as quickly as possible, run through the actions that you took last year and what has happened in the interim.

On the matter of AMA Delegates, as you will recall, we voted to change the wording from "representatives" to "Society members as delegates and alternate delegates" and we require that before every AMA meeting, the four delegates get together and elect a Chairman.

These changes have been incorporated in the revised printing of the Constitution and By-Laws and this procedure of the delegation electing its Chairman, has been carried out.

Last year, we also added a new Commission entitled "Developing Government Health Programs Commission." This commission has been established and the Commissioner, Dr. John Glasson, has been at work with his commission.

On the Resolution of the Committee of Physicians on Nursing regarding the promotion of "Nurse of the Year", this has been implemented by memorandum to County Medical Societies urging the local selection of a "Nurse of the Year" and submission of local selection to the State committee for consideration of State selection.

The 1970 State Nurse of the Year will be honored on Wednesday morning.

This House also approved Resolution 26 adopted by the AMA relating to nursing education and urging increased subsidies to hospital nursing schools.

This matter was referred to the Committee on Legislation which supported the enactment of financial support to the hospital schools of nursing, as you will recall, as passed by the 1969 General Assembly.

The resolution concerning the training of nurses a request for the Society to have an opportunity to testify on this subject is being transmitted to the North Carolina Legislative Research Commission and the Committee of Physicians on Nursing and the Committee on Legislation will jointly present the Society position.

The Pitt County Medical Society resolution on the subject of uniform type identification card for third party payment of medical care, this information contained in the resolution was related by Society repre-

sentatives in discussions with North Carolina Blue Cross and Blue Shield and discussed with the North Carolina Department of Social Services.

Such an identification card system is in operation at the present time, as you know, for Medicaid program.

The request for insurance carriers to include the full name of the insured on all checks. The North Carolina Blue Cross and Blue Shield are now following this procedure and this problem has been discussed with other carriers through a meeting with the Health Insurance Council.

The Resolution from the Committee on Professional Insurance on proposed daily in-hospital money payment plan by Kemper Insurance Group is administered by the Ralph Golden Agency. This insurance is now available and is being sold to this membership.

The resolution concerning bank credit cards. As you recall, you asked the county medical societies to make their own decisions and the memorandum was sent to each county medical society outlining the policy and also a reference article has been published in the Public Relations Bulletin.

The report of the Mental Health Committee on the role of the physician in suicide prevention. A statement entitled, "The Role of the Physician in Suicide Prevention" was printed in leaflet form and distributed and a paper on the subject was also published in the North Carolina Medical Journal.

The recommendation of the Nominating Committee that the ad hoc Committee on Tenure of Office be appointed to study and recommend the number of times a person could be re-elected. You're familiar with this and have it discussed here today.

The committee has been appointed and you have heard the recommended changes in the Constitution and By-Laws.

The policy statement on sex education programs in North Carolina Schools.

Information about the policy statement has been communicated to the State Board of Health, North Carolina Department of Public Instruction by the Committee on Marriage Counseling and Family Education. This committee has also offered its assistance in monitoring films or literature on the subject.

Report of the ad hoc Committee on the Relationship to North Carolina Blue Cross and Blue Shield. A new statement of understanding has been approved and signed by this Society and North Carolina Blue Cross and Blue Shield.

The proposed By-Law change has been implemented and nominations for the expanded Blue Shield Committee you're familiar with and have just elected.

The resolution concerning traffic safety and implied consent law. These two were combined by the Reference Committee.

Action taken is that a copy of the resolution has been placed in the hands of the representatives of the North Carolina Department of Motor Vehicles and a copy sent to the Senate Highway Safety Committee during the 1969 General Assembly.

The resolution concerning environmental pollution. The content of the Reference Committee's amended resolution was presented in a statement by Society representatives at a public hearing held by North Carolina Air and Water Resource Board.

The resolution concerning continuing studies of disasters. This resolution was submitted to AMA for its consideration last July.

The resolution concerning permanent Committee on Medical Education. This committee has been appointed. The By-Laws have been revised establishing a Committee on Medical Education as a standing committee.

The Executive Council recommendation that expenditure be authorized to provide for a foundation in the new headquarters building sufficient to support a possible future two-story addition or a total of four floors, this has been implemented by architectural redesign and has been provided for in actual construction which is now underway.

The recommendation supporting the North Carolina Hospital Association's effort to amend the Workmen's Compensation Act of the North Carolina General Statutes, this has been referred to the Committee on Legislation.

The resolution concerning solicitation and commercial advertising of a medical specialty by a lay corporation in AMA publications, this resolution on the subject was submitted to the AMA delegation for their guidance at the last July meeting.

You will also recall that authority was requested by the Finance Committee to sell the Society's property on the Raleigh-Durham Highway, this property has been placed on the market in the hands of a real estate agency.

The resolution relative to physicians' assistants program at the medical centers, this was referred to the Committee on Medical Education. Periodic reports have been made to the Executive Council by the committee with Society representation at several meetings concerned with physicians' assistants program.

I think in summary I can report to you that your actions have been carried out in every way possible and all action has been implemented.

I would now like to speak briefly to the subject of Reference Committees.

For my edification, will those who are now serving as a delegate for the first time, please raise your hands?

[There followed a showing of hands.]

Thank you.

The House for the last several years has operated under the Reference Committee system and that is that all reports and resolutions admitted here today will not be debated. They will be referred, as you heard the report of the Committee on Constitution and By-Laws, to an appropriate Reference Committee and these committees will meet tomorrow afternoon at two o'clock and all of you have in your packet on a pink sheet the personnel making up these Reference Committees and also the location of their meetings.

I emphasize this because this is where actually the

true action of this session is most likely to take place.

The Reference Committees will accept these resolutions which are the property of this House and they will be discussed. Anyone who appears at these Reference Committees will have an opportunity to speak for or against a particular resolution.

So, if you have a burning interest in any of these, please report to the Reference Committee and have your say.

At the Tuesday afternoon continued session of this House, these Reference Committees will then report. You will have an opportunity to then speak if you have not already spoken adequately, to debate any point and the House will at that time take appropriate action on the recommendations of the Reference Committees.

Is there any question about the Reference Committee system?

[No response]

As you have also heard, the House of Delegates is the ultimate authority of this Society and it has the right to review any of the actions of the Executive Council and it is only proper that we hear the account of actions that have taken place.

Heretofore, it has been traditional for the President to report on the actions taken at the annual meeting of the Executive Council which takes place the day before this House meets and I commend President Beddingfield for having prepared this year a summary of all the actions of all the Executive Council meetings and I recognize him at this time.

PRESIDENT BEDDINGFIELD: Thank you. Mr. Speaker.

Gentlemen, I will not be President but a few more hours and I have not exercised executive prerogative very often during this year. I'm going to take about sixty seconds to do something before I get into this report of the Executive Council, with your indulgence, Mr. Sepaker.

When I introduced Dr. Davis as Speaker today, I made some reference to your previous Speaker.

I was, as you were, tremendously impressed not only with his years of service, but with his "swan song" a year ago and I have felt and others have shared this thought with me that perhaps he ought to have a little more tangible recognition than just those remarks he had in that transcription.

Donald, will you come up here, please?

[Whereupon Dr. Donald B. Koonce, Past Speaker of the House, came up onto the platform.]

Don, this is not going to be a "This is your life!" and it's not going to be a long speech because we all know what you have done and I don't know of any better tribute that I could pay to this man for the service he has given than to read back about two paragraphs of his own words he gave a year ago.

I read from our transcription of a year ago:

Gentlemen, I wonder if you would allow me just a few minutes in my farewell appearance before you. It has been my very great privilege to be one of those who obviously is the object of some of

those new rules and regulations—[he's speaking about tenure]—which have been proposed for limited tenure.

I have served nine of the past eleven years as your Speaker. I have served twenty-one of the past twenty-three years as a member of your Executive Council. This has not been done without considerable personal sacrifice, but I can assure you it has been done with a great deal of pleasure and, frankly, a great deal of fun. I've enjoyed it. I've felt that I have been quite privileged to be in the position that I have been with this House for which I have the utmost respect.

We have a great many dissidents and I speak with authority because I've been one all my life, because I think we have very few, if any destructive dissidents. I hope we won't have them in the future. Let me beg and ask you to have the same patience and tolerance with my successor, who has certainly proved himself, in the mistakes that he will make because he will make them; the same patience and tolerance that you have had with me in the many, many mistakes I've made. May I beg you to always maintain the principle of democratic processes that you always have. May I ask of you that you always remain loyal to those basic tenets of honesty and integrity which have made this House respected and great.

I think those are great words, Donald, and we have prepared a little plaque here that will look better hanging on a wall than in a transcription and reads as follows:

Presented by the Medical Society of the State of North Carolina to Donald Brock Koonce, M.D., the One Hundred and Sixth President of the Society in its One Hundred and Eighth Society year, 1956-57 and Speaker of the House of Delegates for nearly a decade in the Nineteen Sixties. In grateful appreciation for his loyal and dedicated service to North Carolina and American medicine.

Pinehurst, North Carolina, May 17, 1970.

[Whereupon President Beddingfield then presented the engraved plaque to Dr. Koonce, who was then accorded a standing ovation.]

DR. DONALD B. KOONCE: Gentlemen, I can assure you I was not prepared for this. For the first time in my life, I'm speechless! And, that's not a usual role for me at all.

I'm indeed grateful. I would like to say this in all sincerity.

Medicine has given me a great deal more than I have given it. I think that I have given some things that are constructive. I'm very proud of those that I have. Medicine owes me nothing; I owe it everything.

Thank you, very much.

[Applause]

REPORTS OF THE EXECUTIVE COUNCIL

PRESIDENT BEDDINGFIELD: Gentlemen, as your Speaker has indicated, we are trying a method this year that frankly is an experiment and I hope it works very well. Criticism has been leveled in the past that

the delegates receive somewhat of a monumental tome which contains verbatim transcription of a series of meetings of the Executive Council.

It was hard to extract the "meat" and policy statements therefrom. Therefore, what we have done, rather than go to the reporter's transcript of each Executive Council meeting, you have been sent a summary of each Council meeting minimizing trivia and you have before you the summary of the meetings of August 3, September 28, October 12, February 1 and this is a summary of all the meetings with the exception of the meeting yesterday and I will speak briefly to that.

Now, all of the items of major importance are going to be handled as if they were actually resolutions coming from a county medical society and you have these on the white sheets beginning with Report "A" of Executive Council and extending through the alphabet to, I believe, Report "U".

I will read these by title, on those other than the ones that were done yesterday which were summarized at two a.m. this morning, there's a designation on the sheet as to which Reference Committee will receive a particular report so that if you have an interest or concern about a particular policy matter that Executive Council has handled, you will know which Reference Committee to go to.

Starting out with:

Report: A

REPORT OF THE EXECUTIVE COUNCIL

The Executive Council, at its meeting on August 3, 1969 approved the purchase by the Medical Society of the Greenfield lot. The following resolution was adopted:

RESOLVED, that the President of the Society be, and he is hereby authorized and directed to enter into a contract to purchase the property on North Person Street in the city of Raleigh being the lot adjoining and being adjacent to the immediate south of the property now owned by the Society for the sum of thirty-three thousand dollars (\$33,000) plus closing cost and commission and to pay for such purchase such sum from the general funds of the Society, upon the terms of twenty thousand dollars (\$20,000) cash and thirteen thousand dollars (\$13,000) payable over a term of years as he may deem advisable, with interest on such balance as may be required or for the sum of thirty-three thousand dollars (\$33,000) cash payment, such property being the same lot which Worthy & Company has agreed to purchase from the owner by contract dated July, 1969.

This action to be presented to the House of Delegates in 1970.

This was presented by the Executive Council and is referred to Reference Committee II.

Report: B

REPORT OF THE EXECUTIVE COUNCIL

Subject: A Study of the Organization of the Headquarters Office, June 1969

On recommendation of the Blue Ribbon Committee No. 1, the professional management consultant firm of Rothrock, Reynolds and Reynolds (of New York

and Miami) had been previously authorized to make an in depth study of the Headquarters operations of the Society.

The study was presented to the Executive Council on August 3, 1969, by Mr. Michael Pearson, representative of Rothrock, Reynolds and Reynolds, Inc. The report was entitled "A Study Of The Organization Of The Headquarters Office, June 1969".

In outline the observations of the report are as follows:

(1) Decision Making Is Overly Concentrated At The Level Of The Executive Director And This Position Is Involved In A Host Of Minor Issues and Details.

(2) The Duties And Responsibilities Of The Headquarters Office Personnel Are Not Defined With The Clarity Required For Effective Administration.

(3) Many Duties And Activities Are Performed By Staff Assistants Which Should More Appropriately Be Performed By Secretarial Personnel.

(4) Lack Of Specific Objectives, Responsibilities And Adequate Organization Has Resulted In Actual Overwork By Most of The Headquarters Office Staff.

Dr. Jesse Chapman, Chairman Blue Ribbon Committee No. 1, recommended the Report to the Council as presented.

The primary consideration involved in determining the organizational structure include:

(1) Specific reporting relationships which would require decisions concerning minor issues and details to be made at the appropriate level in the organization,

(2) Clearly defined functional responsibilities,

(3) Delegation of duties to free the Executive Director for important policy-making, liaison, and top management functions,

(4) Reporting relationships which would allow for innovation and individual initiative and would facilitate rather than hinder accomplishment of everyday duties.

Recommendations were as follows:

(1) **A New Position Of Executive Vice-President Should Be Created.** The Executive Vice-President would report to and be responsible to the Executive Council. This important position should be filled by the present Executive Director. Unanimously approved.

(2) **The Position of Executive Director Should Be Maintained.** In essence the Executive Director would be the chief administrative officer of the Medical Society, would report to and be responsible to the Executive Council. The present Assistant Executive Director be elevated to this position. Unanimously approved.

(3) **The Position of Assistant To The Executive Director Should Be Retitled Administrative Assistant.** The basic functions of the Administrative Assistant would be expanded and modified. Duly passed.

(4) **The Position of Assistant Executive Director Should Be Eliminated.** Passed unanimously.

(5) **The Position Of Bookkeeper—Operations Accountant Should Be Retitled Controller.** Unanimously passed.

(6) **The Position of Assistant And Education Consultant Should Be Eliminated.** The present responsibilities of this position can be more efficiently and effectively

handled by the Field Service Representative. Passed.

(7) **A Field Service Representative In Charlotte Should Be Established And The Field Service Representative's Responsibilities Expanded.** It was felt that he should not be assigned to a specific locality but should be in a position to move in any area. The appointment of a second Field Representative, was made with the provision that the assignment be made without a specific place of operation. Passed.

(8) **The Position Of Systems Analyst Should Be Created.** Adopted.

(9) **The Position Of Director—Office Operations, Should Be Retitled Office Manager And Should Be Assigned The Responsibility The Title Implies.** Adopted.

(10) **A Secretarial Pool With Five Individuals Should Be Created.** This method would allow the Office Manager to shift manpower resources as needs arise with a more even work load distribution throughout the year. Each of the secretaries in the pool will report to the Office Manager. Adopted.

(11) **The Position of Equipment Operator Should Be Created.** The Equipment Operator would report to the Office Manager and would be responsible for operation of all office machines and equipment and for processing material for mailing. Adopted.

(12) **Weekly Meetings Of Staff Assistants Should Be Held To Facilitate Coordination And To Disseminate Pertinent Information.** Adopted.

(13) **A Full-time Secretary Should Be Assigned To The President Of The Society.** The recommendation that the secretary be on the payroll of the Headquarters Office was discussed. The recommendation was approved, except that it was felt such secretary in all probability would be temporary and could best be handled if the secretary were not on the rolls of the Headquarters Office.

Proposed organization plans, financial implications, as outlined in the Report were adopted without change.

Finally, adoption of the details of the report as amended, with dates of implementation including possible necessary minor changes in dates as recorded in the plan of action would be left to the discretion of the Executive Committee and the consulting firm. Unanimously accepted.

This is also referred to Reference Committee II.

Report: C

REPORT OF THE EXECUTIVE COUNCIL

Subject: Accidental Death Benefits and Medical Expense Reimbursement Insurance Policy covering Officers, Executive Council Members, Staff, Committee Chairmen and Committee Members, and AMA Delegates and Alternate Delegates while on official travel for the Society.

The Executive Council, at its meeting on September 28, 1969, approved the purchase of a \$100,000 Accidental Death Benefit and \$2,500 Medical Expense Reimbursement (after a \$300 deductible) Insurance Policy on Officers, Councilors, Vice Councilors, Commissioners and Ex Officio Members of the Executive Council, Staff members, Committee Chairmen, Committee Members, and AMA Delegates and Alternate Delegates, while

on official travel for the Society.

The proposal for such insurance coverage was presented to the Executive Council taking into consideration the experience of increasing amounts of travel necessary to carry out the work of the Society and its activities.

Bids from two insurance companies were obtained. It was pointed out that any covered individual may file with the State Medical Society office and specify his beneficiary. In the absence of specific instructions, a standard procedure as used by all insurance companies would automatically pay first to the wife. If the wife is not living, it is paid to the child or children in equal shares. In absence of children, it is paid to father or mother or siblings. If there are none of those, it is paid to the estate of the deceased. Policy cost in \$1,511.

The Executive Council, on motion duly made, seconded and passed, approved that the expenditure be put in the budget.

This is referred to Reference Committee II.

Report: D

REPORT OF THE EXECUTIVE COUNCIL

Subject: Membership in the State Medical Society for those osteopathic physicians duly licensed by the North Carolina State Board of Medical Examiners

The Executive Council, at its meeting on October 12, 1969, received a recommendation from the Committee on Hospital and Professional Relations that "the State Medical Society adopt a policy of recognizing the eligibility for membership in the State Medical Society of those osteopathic physicians duly licensed by the North Carolina State Board of Medical Examiners for the practice of medicine who meet the other existing prerequisites for membership as specified in the by-laws."

Following a motion, duly seconded, the Executive Council approved the recommendation with one dissenting vote.

During the Executive Council discussion it was observed that this would be consistent with the AMA House of Delegates action and would also be consistent with the Joint Commission on Accreditation of Hospitals policy.

The opinion was expressed that such action would not require change in the wording of the present constitution and by-laws to accept osteopaths into membership of this Medical Society, if licensed to practice medicine.

The Executive Council discussion also made reference to the fact that to be a member of the Society a physician must either be a member of a component society, or if the component society won't accept the physician, then he can appeal to the Executive Council for membership.

This is likewise referred to Reference Committee II.

Report: E

REPORT OF THE EXECUTIVE COUNCIL

Subject: Policies of the Crippled Children's Division of N. C. State Board of Health.

The Executive Council, at its meeting on October 12, 1969, received a recommendation from the Committee on Hospital and Professional Relations that the policies of the Crippled Children's Division of the State Board of Health be questioned and that it be asked to publish to the Medical Society a statement of the rules and regulations and proper channels through which a physician obtains listing or approval and how approval for rendering routine and emergency care for patients in this category is obtained.

During the discussion, the North Carolina Medical Journal was suggested as one appropriate place for publication of the information when obtained.

It was also indicated that the North Carolina Chapter of the College of Surgeons was concerned about the fact that very few qualified surgeons in North Carolina have been able to obtain listing on this panel and that the North Carolina Chapter would like to coordinate its efforts with any other group working on the situation.

The Executive Council, on motion made and seconded, approved the recommendations of the Committee.

A copy of the appropriate portion of the Executive Council minutes of October 12, 1969, have been delivered to the President of the State Board of Health.

Referred to busy Reference Committee II.

Report: F

REPORT OF THE EXECUTIVE COUNCIL

Subject: State of N. C. urged to appropriate sufficient state funds to obtain maximum matching federal funds for Vocational Rehabilitation.

The Committee on Physical and Vocational Rehabilitation presented a Motion and Resolution to the Executive Council, at its October 12, 1969 meeting, as follows:

Motion

The Committee on Physical and Vocational Rehabilitation of the State Medical Society deplors the failure of the General Assembly to appropriate sufficient state funds to the Division of Vocational Rehabilitation in order to obtain maximum matching federal funds for North Carolina. This failure allowed considerable funds to be lost which might have been utilized in behalf of worthy rehabilitation patients in the State. We urge, therefore, that the attached resolution or some similar resolution be approved by the State Medical Society and referred to the appropriate state agency. This committee also urges that the Legislative Committee be instructed to work toward this objective.

RESOLUTION

WHEREAS, the Medical Society of the State of North Carolina recognizes the tremendous services to the handicapped citizens of the State of North Carolina rendered by the North Carolina Division of Vocational Rehabilitation, and

WHEREAS, we recognize the tremendous financial loss and social burden in the way of non-rehabilitated persons that has occurred from the State not taking maximum advantage of federal funds; therefore, be it,

RESOLVED, that the Medical Society of the State of North Carolina expresses strong disappointment of the action of the 1969 North Carolina General Assembly in not appropriating sufficient funds to match the allotted federal funds and firmly urges that every effort be made to encourage these funds be fully matched in the future.

Adoption of the recommendations was moved, seconded and passed by the Executive Council.

This is referred to Reference Committee I.

Report: G

REPORT OF THE EXECUTIVE COUNCIL

Subject: Need for local physicians to become involved in Regional Health Planning Councils.

The Executive Council, at its meeting on October 12, 1969, received a recommendation from the Committee on Comprehensive Health Service Planning, and on motion made and seconded passed the motion.

The Committee took cognizance of the fact that there is considerable consumerism in Comprehensive Health Planning, fostered by federal regulations and laws, and there is a large proportion of consumers on these Councils, and also a large proportion very often of not very knowledgeable consumers.

The Committee also noted that the Advisory Council on Health Planning in the State of North Carolina has only two practicing physicians on it.

The Committee then presented the following recommendation:

"The Committee, therefore, brings to the Executive Council of the Medical Society of the State of North Carolina this fact and requests that the Executive Council, as the interim governing body, take a specific stand regarding the promotion of an interested element of provider participation in the Regional Health Planning Councils, either by requesting that an interpretation of the regulations or by insisting that the members of this Society and other provider groups insist that they be involved in this field which will affect so vitally those people whom they serve.

"And, further, that this Society emphasize that it is very necessary that M.D.'s in this State involve themselves as individuals in the deliberations and planning of Regional Health Planning Councils."

This is referred to Reference Committee I.

Report: II

REPORT OF THE EXECUTIVE COUNCIL

Subject: Reasonable professional fee to be paid for each patient by the third party payor under the Medicaid program.

The Executive Council, at its meeting on October 12, 1969, received a report from the Committee on Social Service Programs (Including Title XIX, Medicaid), formerly the Committee Liaison to the Welfare Department.

The Committee reviewed a series of regulations governing Part "B" payments, under Medicare, in which the requirements for qualification of an attending physician was spelled out in some eight or ten pages.

It encompassed a series of regulations which would appear to endanger teaching programs in all of the hospitals which have resident and intern training programs.

One example of the problem encountered with the regulation was cited as follows: One of the provisions is such that if there is an attending physician assisting at an operation, and a resident who is capable of doing the operation by himself, the attending physician cannot be paid because his presence is unnecessary to the performance of the operation.

On the basis of hearing the series of recommendations, and the feeling that many of the provisions for the Medicare program are likely to be adopted for Medicaid, the Committee felt there was need for a provision on this subject for the Medicaid program.

The Committee passed the following motion, which was approved by the Executive Council:

"WHEREAS, it is recognized that the most complicated medical and surgical cases are referred to larger hospitals for treatment, this Committee recommends very strongly that arrangements be made for a reasonable professional fee be paid for each patient by the third party payor under the Medicaid program."

This is referred to Reference Committee I.

Report: I

REPORT OF THE EXECUTIVE COUNCIL

Subject: Statement of Policy on Medical Aspects of Sports

The Executive Council, at its meeting on February 1, 1970, was presented a proposed Statement of Policy on Medical Aspects of Sports, outlining the committee's broad objectives.

The Executive Council, on motion, made, seconded and passed, endorsed in principle and returned to the Committee of refinement of wording and resubmission for consideration by the House of Delegates.

The Committee has reworded the Statement of Policy and resubmits the proposed statement as follows:

STATEMENT OF POLICY

ON

THE MEDICAL ASPECTS OF SPORTS

The Medical Society of the State of North Carolina recognizes that with the rapid rise in the number of participants in organized sports activities in the State of North Carolina, also comes an inordinate increase in the number of injuries. The physician's role, in addition to the diagnosis and treatment of athletic injuries, should be broadened to encompass advice and counsel to those persons, organizations and institutions responsible for the administration and implementation of sports activities, in this state. The physicians of this state feel that this broadened role would serve to prevent a great number of injuries and considerably improve the health and welfare of the athlete.

The health and welfare of athletes in North Carolina can greatly benefit by:

1. Improved coaching practices regarding the Medical Aspects of Sports.

3. Improved medical coverage of all contact sports-events by a Doctor of Medicine.

3. The insurance of both proper and safe protective equipment along with a safe athletic environment.

4. Continued efforts to increase the quantity and quality of educational programs designed for both lay and professional personnel in the field of athletic medicine.

5. The insurance of close liaison by the Medical profession with those persons, organizations and institutions responsible for the administration and implementation of organized sports activities in North Carolina.

Recognizing that some of these needs will necessarily require public funds, it is therefore recommended that:

1. The Medical Society of the State of North Carolina work toward the appropriation of State funds in support of organized athletics in the North Carolina Public School System.

To further meet these needs, it is also recommended that:

2. The Medical Society of the State of North Carolina encourages the development of programs:

a. To advise athletic agencies and organizations in North Carolina on the medical aspects of athletic activity with emphasis on the prevention and control of athletic injuries.

b. To collect and develop pertinent information regarding the prevention and treatment of athletic injuries and the recommendation of sound safety measures in athletic programs in North Carolina.

c. To disseminate such information as might be appropriately brought to the attention of the agencies and organizations responsible for athletic programs in North Carolina.

d. To provide information to physicians interested in athletic medicine and provide non-medical personnel the recommendations and principles relating to the health and medical aspects of athletic activities.

e. To promote liaison and cooperation between local medical societies, high schools, colleges and other agencies sponsoring athletic activities in North Carolina, with special efforts made to provide lines of communication between all North Carolina agencies interested in health and welfare of the athlete.

Referred to Reference Committee I.

Report: J

REPORT OF THE EXECUTIVE COUNCIL

Subject: Needed Improvement in Education of Allied Health Personnel

The Executive Council, at its meeting on February 1, 1970, received and approved a Resolution from the Committee of Physicians On Nursing, re: Needed Improvement in Education of Allied Health Personnel. The resolution is as follows:

RESOLUTION

PREAMBLE

There is a tremendous need at the present time in North Carolina for more and better trained personnel. The most promising group of candidates for additional educational training in health careers is in existing

personnel. An individual should not be expected to repeat work in which he is already proficient and should receive due credit for that proficiency.

Innumerable built-in obstacles are present in the health career ladder inhibiting both vertical and horizontal movement and these obstacles are deterrents to selection of health professionals as career choices.

A wide disparity of health educational transfer credits exists within the same institution, between technical institutions, and community colleges and/or institutions of higher learning in the same community and across the State. In-service educational programs for health professionals in hospitals and other institutions have not been integrated into a comprehensive health career ladder program for personnel to receive credit for advancement.

RESOLVED:

A. That the institutions concerned with the education of health personnel undertake planning to:

1. Facilitate and develop appealing and uniform methods by which health personnel, to improve their proficiency, may easily ladder both vertically and horizontally.

2. Provide equivalencies for training received in separate health educational programs in the same and different institutions.

3. Develop equivalencies for health educational training in technical institutions, community colleges, as well as in private and governmental higher educational institutions.

4. Encourage development of equivalencies in courses on local and regional bases and that comprehensive, imaginative programs be worked out in advance for health personnel to further and encourage their additional health educational efforts.

5. Make available, where appropriate, statewide examination in health educational subjects to determine whether or not health practitioners entering programs have desirable proficiencies for which they can be afforded appropriate credit.

6. Encourage health institutions to instigate programs to elevate their employees on the health career ladder.

7. Encourage employers to make available credit bearing, on-the-job, in-service educational programs. Where possible, institution in-service educational directors will be faculty members of the local community college or technical institutions.

B. That this resolution be submitted to North Carolina Professional Health and Educational Organizations for their consideration.

Referred to Reference Committee I

Report: K

REPORT OF THE EXECUTIVE COUNCIL

Subject: AMA Report of Committee on Long Range Planning, the Himler Report.

The Executive Council, at its meeting on February 1, 1970, considered the AMA Report of Committee on Long Range Planning, the Himler Report and directed that a copy be sent to all members of the Executive Council and to each member of the House of

Delegates.

A Copy of the Report, along with an excerpted summary of the recommendations, was mailed to all members of the Executive Council on February 5, 1970 and to all members of the House of Delegates on March 9, 1970.

This is referred to Reference Committee III.

SPEAKER OF THE HOUSE: Mr. President, if I may just say a word about this particular matter.

All of you have received in a previous mailing, a copy of the Himler Report, which in substance is the report of the Committee on Long Range Planning of the American Medical Association and many of you are familiar with the historical background.

This is a truly significant document and much that will influence the future of medicine throughout the country is apt to evolve from this report of its amendments by the American Medical Association.

This is of such significance that the AMA has asked all State Societies to consider this item and to react to it for their benefit.

Now, all four delegates to the American Medical Association have asked that all of you who will please attend the Reference Committee hearing on this matter and give them the benefit of your thinking on this.

Now, we don't mean to instruct our delegates, but we do need to give them the benefit of the wisdom of as many minds as possible.

Because of the significance of this item and because of a strong desire that any member of this Society who has any input into this matter will have a forum, we have this year set up a special Reference Committee which is known as Reference Committee III, as you see, which will be chaired by Dr. Donald Koonce and will meet in the Pine Room the same time as other Reference Committees, two o'clock tomorrow afternoon.

I call your particular attention to this matter and hope that you will read the report and actively participate in the discussion of it.

Thank you.

PRESIDENT BEDDINGFIELD: Thank you, Mr. Speaker.

Report: L

REPORT OF THE EXECUTIVE COUNCIL

Subject: Committee on Relative Value Study consideration of the 1969 California Relative Value Studies.

The Executive Council, at its meeting on February 1, 1970, was presented a Report from the Committee on Relative Value Study regarding the Committee's consideration of the 1969 California Relative Value Studies.

The Committee Recommendations were as follows:

- 1) That the Society not adopt the 1969 California Relative Value Studies as a whole.

- 2) That the Society adopt the five digit Relative Value Studies coding and nomenclature as published in the 1969 California Relative Value Study and which it is understood has been adopted by the American Medical Association in its forthcoming new edition of Current Procedural Terminology.

- 3) That the relative value units as represented in

the 1969 California Relative Value Study, not be adopted.

After discussion of the recommendations, the Executive Council, voted to receive the report as information and refer it back to the Committee with suggestion: from the Executive Council.

The Committee on Relative Value Study met again on April 25, 1970 and passed the following two new motions:

I. Realizing that the American Medical Association has recently adopted a Current Procedural Terminology, but since its adoption other systems of nomenclature have been introduced, therefore: The Committee recommends the adoption of whatever coding and nomenclature is adopted by the American Medical Association.

II. The Committee acknowledges some sentiment on the part of several members to abandon a Relative Value Studies entirely, but the majority of the Committee reaffirms as a practical matter and as a convenience the necessity of a Relative Value Studies.

Utilizing all information available the Medical Society of the State of North Carolina will make the necessary corrections and additions in the 1964 North Carolina Relative Value Studies.

As a deterrent to the use of an across the board conversion factor, appropriate changes will be made in the unit values to prevent the use of an across the board conversion factor and re-emphasize the absence of relativity between the sections.

Until the matter is resolved the use of the 1964 North Carolina Relative Value Studies should continue as the Society approved Studies.

On to: This is referred to Reference Committee I, and I would call to your attention that although this is largely extracted from the February 1, 1970 meeting of the Executive Council, you'll notice at the bottom of this report there is a notation that:

The Committee on Relative Value Study met again on April 25, 1970 and passed the following two new motions—which you have on page 2 there.

These additional two motions were adopted by the Executive Council yesterday so this report actually stems from two separate sessions of the Executive Council. There is a detailed report for those of you who are interested in this relative value study deliberation, that will be available in the Reference Committee. There were not sufficient copies at hand for distribution to the entire House of Delegates. There will be copies in the Reference Committee hearing that will clarify the background of the two new motions.

Now, these additional reports are actions taken yesterday by the Executive Council and as you'll notice there is no Reference Committee assignment. As I read each of these, the Speaker will designate a Reference Committee.

SPEAKER OF THE HOUSE: This will be referred to Reference Committee I.

SPEAKER OF THE HOUSE: Also to Reference Committee I.

PRESIDENT BEDDINGFIELD: I would invite your careful attention to this particular report "N". This has some bearing on all the good things I had to say about Medicaid a few moments ago.

SPEAKER OF THE HOUSE: This will be referred to Reference Committee II.

PRESIDENT BEDDINGFIELD:

SPEAKER OF THE HOUSE: Also to Reference Committee II.

PRESIDENT BEDDINGFIELD:

SPEAKER OF THE HOUSE: This will go to Reference Committee II also.

Report: M

REPORT OF THE EXECUTIVE COUNCIL

Subject: Rate Increase in Professional Liability Insurance.

The Council received a report from the Committee on Professional Insurance indicating that the insurance carrier for our group professional liability insurance contemplates a premium rate increase of approximately 36%, and is shortly to appear before the Insurance Commissioner requesting approval for this increase. The Committee presented data which seemed to justify such an increase, based on actuarial experience. It was pointed out that even with this increase, members are able to purchase this protection through the Society group policy at rates lower than those offered by other carriers, and considerably lower than rates in some other states. While regretting the necessity for any rate increase, the Council voted to accept the report of the Committee, and not to oppose the proposed increase.

SPEAKER OF THE HOUSE: This will be referred to Reference Committee I.

Report: N

REPORT OF THE EXECUTIVE COUNCIL

Subject: Chiropractic Services Under Medicaid.

The President reported to the Council that the Commission of Social Services had been requested in February to request an opinion from the Attorney General as to the legality of the inclusion of Chiropractic Services in The Medicaid Program. Although the Commissioner promptly transmitted this request to the Attorney General, the opinion was not received until May 14.

The question was raised by the Society because:

1. The Title 19 plan for the state as submitted to HEW by the state made no mention of Chiropractic Services.

2. At no time in the legislative consideration of Medicaid, or the appropriations therefor, was any mention made of inclusion of Chiropractic.

3. The language of the 1969 Appropriations Act stated in regard to Medicaid: "Services under this program will be limited to:

"Physicians' services (doctors of medicine, surgery, osteopathy, and podiatry)"

4. The Minutes of the State Board of Social Services do not indicate that the Board had ever considered the inclusion of Chiropractic, although that Board is cer-

tified by the State to the Federal Government as the "single State agency" designated to administer Medicaid.

Notwithstanding all the above, the Attorney General has submitted an opinion that it is legal for the State to include chiropractors under Medicaid. The opinion holds that the term "physicians' services," although that term was defined parenthetically by the General Assembly, nonetheless also covers chiropractic services because such services were not categorically excluded.

The Council resolves that the Committee on Legislation, with assistance of the Legal Counselor, be directed to pursue the matter and to consider relief in the courts.

SPEAKER OF THE HOUSE: Also to Reference Committee I.

PRESIDENT BEDDINGFIELD: I would invite your careful attention to this particular report "N". This has some bearing on all the good things I had to say about Medicaid a few moments ago.

Report: O

REPORT OF THE EXECUTIVE COUNCIL

Subject: Cigarette Advertising in Journal

The Council was advised that The Society has received a few letters from members objecting to the acceptance of cigarette advertising in the NORTH CAROLINA MEDICAL JOURNAL.

The Editorial Board has requested a policy determination and after some discussion, the Council, without dissent adopted a motion that the Journal continue to accept cigarette advertising.

SPEAKER OF THE HOUSE: This will be referred to Reference Committee II.

Report: P

REPORT OF THE EXECUTIVE COMMITTEE

Subject: Termination of Pregnancy

The Executive Council received a recommendation from the Committee on Mental Health, that the following policy statement be adopted:

"Although presently regulated to some extent by laws, the Medical Society of the State of North Carolina believes that the initiation, continuation, or interruption of pregnancy is a personal responsibility of each woman. Any health problems arising out of pregnancy are a concern of the pregnant woman and her chosen medical doctor."

The Council voted to endorse the Committee proposal and to accept it an expression of the Society policy.

SPEAKER OF THE HOUSE: Also to Reference Committee II.

Report: Q

REPORT OF THE EXECUTIVE COUNCIL

Subject: Nursing Education

The Council received a report from the Committee of Physicians on Nursing indicating that the Committee had met several times with representatives of the nursing profession, and that out of these discussions has

come realization for a need of a more important role for the Joint Committee on Nursing Education (JCNE) which is a sub-function of the State Board of Education and the State Board of Higher Education. It was suggested that advancement of the educational processes in nursing in the State would be best implemented through action of JCNE, and, that this would require the addition of a full-time director and some staff, to operate a program to be funded by the State.

The Committee requests Society endorsement of this program in principle and requests the assistance of the Committee on Legislation and the Committee on Public Relations in appropriate areas.

The Council approved and endorsed the request of the Committee.

SPEAKER OF THE HOUSE: Reference Committee II.

Report: R

REPORT OF THE EXECUTIVE COUNCIL

Subject: Physician's Assistants

The Council was advised that officers of the Society, along with representatives of the Board of Medical Examiners, had extensively studied the desirability and feasibility of providing a mechanism for the accommodation of physician's assistants into the health care team. The advice of the Society has been sought by the Legislative Research Commission in this regard. Recognizing the need for the development and utilization of new forms of health manpower, while at the same time being aware of the necessity of preserving the quality of care, and of the fact that the physician assistance program is still in a developmental stage, with approval of training programs and curricular yet to be accomplished, the Council adopted the following Resolution:

WHEREAS there is a great need by physicians for people to furnish technical aid and assistance in their practice, and

WHEREAS the educational programs developing within this and other states to train individuals to work for and upon the order of doctors of medicine to help meet those needs should be encouraged, and

WHEREAS these persons are known by class as physicians' assistants, and

WHEREAS there is a need for clarification of the relationship of physician's assistants to the doctor, under whose responsibility he renders services, and to the doctor's patients who receive the services, and

WHEREAS services performed may be those constituting the practice of medicine as defined in the Medical Practice Act.

THEREFORE BE IT RESOLVED that, at the present time, a physician assistant be considered as serving as the agent of the doctor, when on order of or by permission of the doctor, he, the physician assistant, performs any services which may be interpreted as the practice of medicine, and

FURTHER BE IT RESOLVED that the Committee on Legislation of this Society be empowered to encourage and work with the Board of Medical Examiners and other interested parties to develop and re-

quest appropriate legislation to this end, so that the training and employment of these physician's assistants be encouraged.

SPEAKER OF THE HOUSE: Reference Committee II.

REPORT: S

REPORT OF THE EXECUTIVE COUNCIL

Subject: Report of ad hoc Committee on Relationship of MSSNC to N. C. Blue Cross Blue Shield, Inc.

The Council considered the additional report of the ad hoc Committee, a preliminary report beyond that appearing in the Compilation. The report, with the exception of the final recommendation, was accepted as information.

The final Committee recommendation:

"(The Committee) **THEREFORE** recommends division of the (N. C. Blue Cross Blue Shield) Board in such manner that the majority of the Board for Blue Shield matters be practicing physicians"

was considered at length. The Council was impressed by the argument that the interests of physicians seem to be adequately safeguarded under the existing single Board, and that moreover professional matters including claims adjudication are presently handled entirely by the Society's Blue Shield Committee, and not by the Board of Trustees.

The Executive Council moved to refer this part of the report to the House of Delegates with a recommendation for disapproval.

SPEAKER OF THE HOUSE: Reference Committee I.

Report: T

REPORT OF THE EXECUTIVE COUNCIL

Subject: Acceptance of Memorial Gifts for Interior Furnishings for the New Headquarters Building

The Committee on Headquarters Facility presented an up-to-date account of progress on our new building. Progress is excellent. The Committee points out that in similar buildings across the country, there are frequently requests from individuals, families, firms etc., for an opportunity to donate memorial or commemorative gifts in the interior furnishings of the building. Such donations might be in the form of money for a piece of furniture, furnishings for a particular room, a painting, a fountain that would be incorporated into the landscape design, etc., or could take the form of the donation of some objet d'art, medical artifacts, etc.

Believing that there are those in this State who might like such an opportunity to donate a memorial gift, the Executive Council voted to adopt a policy of accepting such gifts. This is not to be construed as an active solicitation of our members for extra funds beyond their presently assessed building fund dues, but such donations of money or physical objects would be entirely voluntary. All items would be subject to the approval of the Building Committee and architect so as to avoid ending up with inappropriate items.

SPEAKER OF THE HOUSE: To Reference Committee II.

Report: U

REPORT OF THE EXECUTIVE COUNCIL

Subject: Position Paper on the Emotionally Disturbed Child

The 1969 General Assembly established a Commission to Study the Problems of Emotionally Disturbed Children in our State. The Commission has requested a "position paper" from the Medical Society, and the Subcommittee on Children's Services of the Committee on Mental Health, in collaboration with the Committee on Child Care, was requested to develop such a document.

This project was accomplished on rather short notice and not in time for reproduction of the entire document for all Delegates. The "position paper" has been reviewed by the two committees named above, by the Chairman of the Committee on Mental Health, and by the President, all of whom recommend adoption of the paper by the House of Delegates.

The Executive Council accepted the report for transmittal to The House of Delegates.

Copies of the "position paper" will be available in the Reference Committee.

SPEAKER OF THE HOUSE: Reference Committee II.

PRESIDENT BEDDINGFIELD: This concludes the assignment of the specific items. Your consideration of the other matters handled by the Executive Council which were deemed of lesser importance and not worthy of a separate sheet of paper will be found in these summaries of the meetings.

These will not be deliberated unless some delegate feels impelled to bring them to the attention of the House.

On reviewing the actions of the Executive Council yesterday, I believe, Mr. Speaker, actually anything of any significance has been handled by referral of the documents that we have just disposed of by placing them with a Reference Committee and it requires no other comment at this time in regard to yesterday's Executive Council meeting.

There is one exception which I will defer until consideration of the next item, the 1970 budget.

Now, the budget is in your compilation which has been sent to you. It is submitted in the name of the Council to you having been approved in sequence by the Committee on Finance and by the Executive Council.

I do not believe, Mr. Speaker, or Mr. Vice Speaker, there is ordinarily any referral of the budget. This has been simply disposed of and it is subject to the pleasure of the House at this time.

After the House finished this deliberation about the budget, I'd like one more second before I sit down.

SPEAKER OF THE HOUSE: Thank you, Mr. President.

Are there any questions related to the budget? There are knowledgeable people here, other than I, who might discuss it for you.

Are there any questions concerning the budget?

(No response)

If not, may I have a motion that it be adopted.

(The motion was made and seconded from the floor.)

It has been moved and seconded that the budget be adopted. Is there any discussion or question?

(No response)

If not, those favoring the motion, please say "aye"; opposed "no".

The budget is adopted.

PRESIDENT BEDDINGFIELD: Finally, Mr. Speaker and gentlemen, on behalf of the Executive Council and on behalf of the individuals concerned, I wish to make an announcement of I think great moment to this organization.

On behalf of Mr. James T. Barnes and on behalf of the Executive Council, I announce Mr. Barnes' retirement effective July 1, 1970 of this year.

Thank you, very much.

DR. SHAFFNER: Mr. Speaker!

SPEAKER OF THE HOUSE: Thank you, Mr. President.

Mr. President-elect!

DR. SHAFFNER: I request permission of the House to present a special resolution at this time.

SPEAKER OF THE HOUSE: Would you state the nature of your resolution?

DR. SHAFFNER: The nature of my resolution is a tribute to Mr. James T. Barnes.

SPEAKER OF THE HOUSE: As you know, any resolution not previously submitted and not coming from the Executive Council, must be heard only if two-thirds of the House are willing to hear it.

DR. FRANK W. JONES: Let us hear it!

SPEAKER OF THE HOUSE: The motion has been made—

DR. WILKERSON: Second the motion.

SPEAKER OF THE HOUSE: And, seconded that the House hear Dr. Shaffner's resolution.

It will require a two-thirds affirmative vote.

Those favoring the motion please say "aye"; opposed "no".

Dr. Shaffner, would you approach the podium and proceed.

DR. SHAFFNER: Mr. Speaker, Mr. President, Delegates:

RESOLUTION IN TRIBUTE TO JAMES T. BARNES

WHEREAS, James T. Barnes is retiring from the position of Executive Vice President of the Medical Society of the State of North Carolina effective July 1, 1970, and

WHEREAS, Mr. Barnes was the FIRST paid employee of this Society, having been the last of ten applicants interviewed for the position of its first Executive Secretary by the committee headed by Dr. Eric Bell, Sr. and meeting at the Cherry Hotel in Wilson and having been hired at two o'clock a.m. on July 19, 1947, during the term of President Frank A. Sharpe, and

WHEREAS, he has since then been in the continuous employ of this Society for almost twenty-three years, and

WHEREAS, he has organized, managed and enlarged the headquarters staff with consummate skill to serve the members of this Society and the causes of medicine within the State, and

WHEREAS, he has managed the fiscal affairs entrusted to him with such acumen that his efforts over a twenty-two year period have resulted in revenues to the Society for its activities, over and above that from membership support, of an amount approximately one million dollars, and

WHEREAS, the net assets of the Society at the conclusion of his status of Treasurer on September 30, 1969, was considerably in excess of three-quarter million dollars, and

WHEREAS, during this time and as an expression of his concern for the work of the Society he had been willing and had even recommended that his personal compensation be set below that of men of less tenure and less capacity in similar positions of trust in other medical societies, and

WHEREAS, he has had the responsibility of overseeing the beginning of construction of the new headquarters facility and he has contributed greatly to the assurance that this facility will be a prominent and permanent home of the headquarters of this Society, and

WHEREAS, his efforts to enhance the stature of this Society as a component of the American Medical Association has brought not only credit to this Society, but also national recognition to him personally, to wit: The Presidency of the American Association of Medical Society Executives and selection for designation as a "Sternwinder" among the nation's medical society leaders, as published in the AMA P. R. Doctor, and

WHEREAS, his service to others outside of his Society duties may be judged by his participation in the activities of the following organizations of which he is a member: N. C. Patient Care Committee, Board of Directors of Doctors' Museum, North Carolina Health Council, Association for the N. C. Regional Medical Program, N. C. Mental Health Association, N. C. Mental Health Council, N. C. Conference of Social Services, N. C. Hospital Association, N. C. Public Health Association, American Public Health Association, N. C. League for Nursing and the National League for Nursing, and

WHEREAS, he has always championed the cause of good medical care for all, and has endeavored to inform the Society of events affecting this cause, so that the Society may respond with an informed judgment on its position, and

WHEREAS, his devoted service has known no limitation of time or distance in an effort to counsel with and serve its members, and

WHEREAS, in all this he has never tried to dictate to the Society what it should do, but rather help the Society with all his talents to carry out its work, and

WHEREAS, all who have been closely associated with him, the officers, committee members, staff members, and members at large have come to love this dedicated man, and

WHEREAS, his love for this Society is best expressed in his closing words in his report of the Executive Vice President for this year; to wit:

No one can find greater satisfaction than in the love of the cause one has served. This tribute I pay to the Society and to the profession it represents. If there are capabilities remaining, these were committed to you more than two decades ago and while a capacity remains, it is fully committed today.

Therefore, be it,

RESOLVED, that this House of Delegates hereby pay tribute and express its deep appreciation and thanks to Mr. James T. Barnes for his loyal and devoted service to the Medical Society of the State of North Carolina and its component societies and its members during twenty-three years, and be it further,

RESOLVED, that recognition be hereby given to his many contributions of time and talents, often above and beyond the call of duty, to the Society and its members, to many public, private, and professional organizations dealing with the health care needs of all citizens of North Carolina and to the causes of American medicine throughout the nation, and be it further,

RESOLVED, that in an effort to do lasting honor to this man, beloved of all and whom we hold in such high esteem, this House of Delegates does hereby empower the Executive Council to have painted a portrait of Mr. Barnes, to be suitably framed and permanently displayed in the headquarters facility of the Society, and that an appropriate and framed photographic copy of the portrait be given to Mr. Barnes, and be it further,

RESOLVED, (a) this resolution be spread upon the minutes of this House of Delegates, (b) that a copy bearing the date of adoption and the signature of the Speaker of this House be published in the NORTH CAROLINA MEDICAL JOURNAL and that similar copies be made available as requested to his many friends and associates for display or publication as they may see fit, (c) that a dated, signed, and appropriately framed copy be permanently displayed adjacent to the portrait of Mr. Barnes, and (d) that another date, signed and appropriately framed copy be given to Mr. Barnes.

Mr. Speaker, I move that this resolution be considered and acted upon at this time, without referral to a Reference Committee.

SPEAKER OF THE HOUSE: Thank you, sir. May I have a second?

DR. WILKERSON: Second the motion.

SPEAKER OF THE HOUSE: The motion has been made and seconded that this resolution be acted upon. It's my feeling that you do desire to act upon

it now rather than have it referred to a Reference Committee and consequently, it is open for discussion.

Is there discussion of the resolution?

(No response)

If not, so many as favor the resolution please say "aye"; opposed "no".

(The motion carried unanimously.)

DR. SHAFFNER: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: I move that the record show clearly that this resolution was passed unanimously.

SPEAKER OF THE HOUSE: Thank you, Dr. Shaffner.

(Whereupon a standing ovation was then accorded to Mr. James T. Barnes.)

Jim, I don't want to add to what this resolution says so clearly and what all of us feel so deeply and sincerely. We do thank you for your great and long service.

Thank you, sir.

Election Results—Board of Medical Examiners

I'd like to announce the result of the balloting for the two members elected to the North Carolina Board of Medical Examiners who are Dr. Edmundson and Dr. Sprunt.

RESOLUTIONS

The House is now ready to receive resolutions, copies of which you have in your packet on the yellow sheets and as I read the subject, we would ask that a representative from the Society introducing this resolution rise and read the resolved only. Please let us read the whereases and you read the resolves.

These resolutions will not be open for discussion but will be referred.

Resolution No. 1 from Union County Medical Society.

Will those who want to speak proceed immediately to a microphone, please and you will be recognized? Is there anyone here from Union County Medical Society?

(No response)

Again, we would encourage every society who feels strongly enough about an item to introduce a resolution to please have someone here to introduce it and to be prepared to speak to it in the Reference Committee.

Technically, the House has the right to reject a resolution which is not supported in that way, but we will not do that and I will take the liberty of reading this one.

Resolution: 1

Introduced by: Union County Medical Society
Subject: Opposition of Medicare Law in general

BE IT RESOLVED, that the State Medical Society of North Carolina go on record opposing the Medicare Law in general and specifically the absolutely wrong and most discriminatory section 260.12, subparagraphs A, B, C, D, and E. Also that this action be forwarded by letter to the appropriate section of the American Medical Association and the appropriate section of the Medical Societies of the remaining forty-nine (49) states requesting their full support.

Also that such discriminating laws be widely and frequently publicized through all news media.

This will be referred, as you see, to Reference Committee I.

Resolution No. 2 from Lincoln County Medical Society.

Is there anyone here from Lincoln County Medical Society? (No response)

Resolution: 2

Introduced by: Lincoln County Medical Society

Subject: Physicians problem of paper work on request from insurance companies and governmental agencies

WHEREAS, physicians consider as a major concern the amount of paper work required of a physician to collect his own fees, to permit the patient to collect his disability payments, and to provide medical history information to insurance companies and governmental agencies:

WHEREAS, the amount of work is increasing at an alarming rate:

WHEREAS, we feel that the forms and methods for these replies must be standardized and minimized to contain only pertinent information:

THEREFORE, the Lincoln County Medical Society hereby resolves to formally request the Medical Society of the State of North Carolina to meet this problem by direct and prompt action. The Lincoln County Medical Society requests that a committee of no less than twenty members of which no more than 50% shall have held a state medical society office be appointed by the State Medical Society and charged to conduct hearings in no less than ten geographic areas of this state for the purpose of inviting physicians to appear and offer suggestions for methods or procedures for streamlining paper work and abbreviating forms. The committee should also seek out and utilize information from those states wherein local societies, clinical groups, and hospitals have pioneered in this area and evolved more efficient forms for their usage than we in North Carolina enjoy.

This Committee should be charged to complete its hearings and prepare its report with recommendations to the Medical Society of the State of North Carolina within twelve months from the date the committee is appointed.

This report should then be published in the State Medical Journal.

This is referred to Reference Committee I.

Resolution No. 3 from Harnett County Medical Society.

Dr. Blackmon, would you identify yourself please, sir.

DR. BRUCE BLACKMON: Dr. Blackmon from Harnett!

This pertains to the shortage of medical personnel in North Carolina.

Introduced by: Harnett County Medical Society
munities in North Carolina

Subject: Shortage of medical personnel serving com-

Resolution: 3

WHEREAS, the people of North Carolina, especially the members of the medical profession, are conscious of and concerned about the shortage of medical personnel serving communities in our State; and

WHEREAS, recent statistics show that North Carolina has a total of 103 physicians per 100,000 population as compared with a national average of 153 per 100,000; and

WHEREAS, six metropolitan counties in the State have 26% of the population, but have 43% of the physicians; and

WHEREAS, counties with metropolitan characteristics have an average of 90 practicing physicians per 100,000 populations as compared with 30 practicing physicians per 100,000 in counties with rural characteristics, with the added significant fact that 20% of the rural physicians are over 65 years of age; and

WHEREAS, North Carolina ranks 44th in the nation in order of physicians in the private practice of medicine; and

WHEREAS, Robert Scott, Governor of North Carolina, expressing a "deep and growing concern," has stated that there is a crisis in health care in our State and called for the "full cooperation of all our State's health system," to "halt and reverse the downhill course that we are on now";

NOW, BE IT RESOLVED that the Harnett County Medical Society hereby asks the Medical Society of the State of North Carolina to consult with the POLITICAL POWERS THAT BE to correct this situation by petitioning the Governor:

BE IT FURTHER RESOLVED, that the Medical Society of the State of North Carolina ask the Governor of North Carolina to name a Commission to study the medical needs of the community areas of North Carolina and PROPOSE POSSIBLE SOLUTIONS for these problems and report to the Governor and the Medical Society by November 1, 1970, prior to the commencement of the 1971 Legislature;

BE IT FURTHER RESOLVED, that recommended membership of this Commission shall consist of thirty individuals, of whom 15 shall be family physicians appointed by the Governor, a representative with authority from each medical school in the State, and 12 members at large appointed by the Governor of the State of North Carolina.

SPEAKER OF THE HOUSE: To Reference Committee II.

Resolution No. 4 is from the Executive Council and I will ask our Constitutional Secretary and President-elect, Dr. Styron, to please present this and other resolutions from the Executive Council.

SECRETARY STYRON: Mr. Speaker,

Resolution No. 4

Introduced by: Executive Council from Committee on Community Health (Rural and Urban)

Subject: Environmental Pollution

WHEREAS our increasingly technological development has led to an increasing pollution of our air, soil and water and land with solid pollutants, chemical pollutants and particulate pollutants, and

WHEREAS it is known that many of these pollutants are a hazard to health of the living generations, and

WHEREAS many chemical and nuclear pollutants through their toxicity, and carcinogenicity produce adverse health conditions in the living generations, and

WHEREAS chemical and nuclear pollutants through their ability to produce mutagenicity thus posing lethal threats to unborn generations produce a long range threat not yet completely evaluated, and

WHEREAS air pollution, water pollution and soil pollution pose a threat which has led to the statement that "Problems of living in today's environment are reaching proportions which are truly monumental"*

BE IT RESOLVED that the Medical Society of the State of North Carolina

(1) Urge county medical societies to become cognizant with environment pollution problems in their respective county and bring such to the attention of responsible authorities.

(2) Urge the Department of Water and Air Resources to use all resources available to rid our air, water and soil of pollution.

(3) Commend the University of North Carolina for its vision in the creation of a Department of Environmental Sciences and Engineering of the School of Public Health and urges that it intensify its continuing efforts to train individuals with special knowledge of the problems of detection and prevention of pollution and maintenance of a high quality environment.

SPEAKER OF THE HOUSE: This will go to reference Committee II.

SECRETARY STYRON:

Resolution No. 5 also from the Executive Council.

Resolution: 5

Introduced by: Executive Council!

from Committee on Community Health (Rural and Urban)

Subject: PESTICIDES

WHEREAS, pesticides, while providing methods of pest control and increasing the potential of food supply, and

WHEREAS, their importance to agriculture is recognized, and

WHEREAS, their dangers to health are also recognized, and

WHEREAS, certain pesticides through their inability to be rapidly degraded to harmless products produce long range as well as immediate hazards.

BE IT RESOLVED that the Medical Society of the State of North Carolina go on record as favoring the removal from and prevention of the use of pesticides in ways that could possibly be harmful until their safety be demonstrated from the point of view of toxicity to human beings, teratogenicity, cancerogenicity, and mutagenicity,

BE IT ALSO RESOLVED that the Medical Society of the State of North Carolina go on record as recommending the immediate cessation of the use of DDT in the State of North Carolina.

FURTHER BE IT RESOLVED that a copy of this Resolution be forwarded to the North Carolina State Department of Agriculture, the Legislative Research Commission of the North Carolina General Assembly, Subcommittee on Pesticides.

SPEAKER OF THE HOUSE: To Reference Committee II.

SECRETARY STYRON: Resolution No. 6,

Resolution No. 6

Introduced by: Executive Council from Committee on Community Health (Rural and Urban)

Subject: Malnutrition

WHEREAS, the physicians of the Medical Society of the State of North Carolina recognize that malnutrition exists among a significant portion of our population, and

WHEREAS, it is recognized that malnutrition may assume many forms: in clinical and subclinical forms, and as evidenced by emotional behavioral and attitudinal deviations from the normal, and

WHEREAS, there is a great need for the state agency supervising and administering these programs at present to cut down on the present inordinate amount of red tape and paper work involved, to the end that the required and needed foods can be made available easily and as expeditiously as possible, and

WHEREAS, in this connection, there is a need to eliminate multiple agency eligibility certification of recipients at the local level by coordinating all eligibility determination for foods through one agency.

BE IT RESOLVED, that the Medical Society of the State of North Carolina go on record as urging and recommending to all agencies involved that if food programs are conducted as a supplement or of providing the main portion of the diet of malnourished individuals, as part of a government program to alleviate this condition, that such programs be simplified and coordinated so that the food can be easily secured and distributed to recipients.

SPEAKER OF THE HOUSE: To Reference Committee II.

Resolution No. 7 is from the Cumberland County Medical Society. Is there anyone here from the Cumberland County Medical Society?

DR. THOMAS G. HURDLE:

Resolution No. 7

Introduced by: Cumberland County Medical Society
Subject: Expansion of basic science department in three medical schools in an attempt to ease the doctor shortage

BE IT RESOLVED that the Committee on Medical Education and the Committee on Comprehensive Health Service Planning meet jointly to discuss the feasibility of the expansion of the basic science departments of the three medical schools in the State of North Carolina. The resultant increased number of medical students to receive some clinical training in the existing Hill-Burton community hospitals throughout the State. Consideration of such a plan is suggested in an effort to:

1. expose medical students to the practice of medicine in community hospitals in the State.
2. to make medical services available to rural communities which have no doctors or replacements for doctors who have passed on
3. to increase the number of medical doctors being graduated in an attempt to ease the doctor shortage brought about by population increases.

The proceedings of such a meeting or meetings to be made known to the Medical Society of the State of North Carolina at the annual meeting in 1971.

SPEAKER OF THE HOUSE: Thank you, sir.

To Reference Committee II.

Resolution No. 8 from the Executive Council.

Dr. Styron!

SECRETARY STYRON:

Resolution: 8

Introduced by: Executive Council

Charles A. S. Phillips, Commissioner

Subject: North Carolina Association of Rescue Squads

WHEREAS, the North Carolina Association of Rescue Squads has involved a large number of individuals dedicated to the rescue of injured persons, and

WHEREAS, the North Carolina Association of Rescue Squads has set high standards for rescue procedures and first-aid administration throughout our State, and

WHEREAS, the North Carolina Association of Rescue Squads has increased its scope of activities by organizing new Rescue Squad Units and providing through its State organization for rescue operations involving mass casualties, and

WHEREAS, the Rescue Squad in many areas has assisted in providing ambulance service through its organization where it would operate to the benefit of the citizens of these areas; be it therefore,

RESOLVED, that the Medical Society of the State of North Carolina do express their appreciation to the North Carolina Association of Rescue Squads for their contribution to the overall care of the sick and injured and offer assistance as might be requested from time to time.

SPEAKER OF THE HOUSE: To Reference Committee II.

Resolution No. 9 from the Catawba County Medical Society.

DR. J. HENRY CUTCHIN, Jr.: Henry Cutchin of Catawba County.

This resolution is not in proper form. However, the first paragraph would be resolved.

Resolution No. 9

Introduced by: Catawba County Medical Society

Subject: Medicare and Medicaid programs

The physicians of the Catawba County Medical Society recommend that the Medical Society of the State of North Carolina urgently request that our legislators exert their influence to put into proper focus the role of the physician in the implementation of the Medicare and Medicaid programs and to deter-

mine whether or not there is a deliberate attempt to disparage physicians on a national level by continuous attacks on their integrity and dedication.

The publicity resulting from the release of the report of the Senate Finance Committee on Medicare and Medicaid is the most recent case in point.

We resent being singled out as being responsible for the financial faults of Medicare and Medicaid. We resent the implication that fraud by physicians is rife in these programs when in fact evidence of fraud by physicians is demonstrably small and insignificant in relation to the cost of the overall program. The evidence is that the great majority of physicians do not overcharge, are not abusing the program and are dedicated to making Medicare and Medicaid work.

We are discouraged. We dislike being scapegoats. We look to our statesmen in Congress to set the record straight, to let it be known that they have faith in the medical profession, and that the vast majority of physicians are honest and dedicated to providing high quality medical care to all persons.

SPEAKER OF THE HOUSE: Thank you.

This will go to Reference Committee I.

Resolution No. 10 from Rowan-Davie County Medical Society.

DR. LLOYD HARVEY ROBERTSON: Dr. Robertson from Rowan-Davie Society.

Resolution No. 10

Introduced by: Rowan-Davie County Medical Society
Subject: Fee Schedule of the Industrial Commission

WHEREAS, it is well known that the present fee schedule of the Industrial Commission in certain specialized fields of medicine is far below the usual and customary fee for the similar services provided private patients in North Carolina and the paper work required for payment is in excess of that required by other third parties, we feel that these items in effect are evidence that the medical profession in North Carolina is forced by law to partially subsidize the proper medical care requirement of Industrial Commission cases in the State of North Carolina,

WHEREAS, it is our understanding there is no legal position for the establishment of a fee schedule and that this fee schedule has been established only by precedence and that any such schedule be disregarded.

THEREBY, BE IT RESOLVED, that the Rowan-Davie County Medical Society recommends that the delegate body of the Medical Society of the State of North Carolina take official cognizance of the fee schedule discrepancy between private and Industrial Commission and that it initiate legal action that would require the Industrial Commission of the State of North Carolina to do away with any and all fee schedules and be required to pay usual and customary charges for care provided for those individuals falling under their statutory jurisdiction.

SPEAKER OF THE HOUSE: This is changed. This will be referred actually to Reference Committee I if you will. It is appropriate to other resolutions. In an effort to equalize our work, this will go to Reference

Committee I.

Resolution No. 11 from Rowan-Davie County Medical Society.

DR. DONALD H. LOMAX: Lomax, Rowan-Davie.

This is very long and not in proper form, but what it's saying here is our Society felt there was discrimination in the surgeon's fee schedule to those surgeon in smaller towns and they are saying in an effort to resolve it that effort be made to compensate physicians on their training and ability and not on their training and ability and not on their geographic location.

SPEAKER OF THE HOUSE: Thank you, sir.

Resolution No. 11

Introduced by: Rowan-Davie County Medical Society
Subject: Inadequate Medicare Payments to Surgeons of the Rowan-Davie Area.

The Rowan-Davie County Medical Society recommends to the Medical Society of North Carolina that Surgeons and surgical specialties of this area should be allowed the same fees as the larger cities and teaching institutions. We present the following facts with reference to the practice of Surgery in that area:

1. We believe that the Surgeons in this area are being discriminated against in the allowance made by the Medicare carriers, Prudential Insurance Company and Travelers Insurance Company.

2. Prior to Prudential operating as a third party vendor, many of us were receiving \$6.00 per unit (based on the Relative Value Scale). We have been "rolled back" to the maximum of \$5.50 per unit. Furthermore, we have been placed in Class III Category which is next to the bottom for this State.

Surgeons in the "teaching centers" are being allowed the highest fees, and they are in Class I. Surgeons in the larger cities are in Class II and are also being allowed a higher fee.

The Surgeons in this area were placed in Class III without any consultation. We, the Surgeons in this area, have tried repeatedly to have these things changed and have asked for the reasons for the discrimination against the Surgeons in these two counties. All we have obtained from either the insurance carrier and the Social Security Administration is a lot of bureaucratic run around and a refusal to reveal to us fee allowances being made in the larger towns and teaching institutions. We believe our surgical fee allowances should be the same as the larger North Carolina cities and teaching institutions for the following reasons:

(1) Our costs of doing business are as high or higher.

(a) we must compete locally with the Veteran's Administration Hospital pay scale for nurses and medical secretaries. Charlotte, Greensboro, Raleigh, Winston-Salem and Wilmington do not.

(b) Building cost for offices or homes are as high or higher here than in the larger cities. Example:

Ervin construction, Charlotte, can build, because of large volume and buying power, for less per sq. ft. than local small contractors in this area.

(c) Interest Costs: These are higher in the smaller towns, whether from (1) commercial banks, (2) building loans, or (3) institutions such as insurance companies. This is predicated upon the fact that if the lender has to foreclose and resell the building in a smaller area, the selling is more difficult than in a larger city.

(d) We pay the same professional liability insurance rate.

(II) To continue the present policy of discriminatory payments (less) to the surgeons in the medium and small towns will only worsen the maldistribution of physicians under present policy:

(a) A physician starting into practice will tend to go where Medicare allows the greatest fee. These areas will continue to have fewer physicians under present policy:

1. Appalachian area

2. Coastal areas (Eastern N. C.)

(b) A recent survey of this county (Rowan) indicated that in the next five years forty-five (45) additional physicians will be needed. Physicians will be reluctant to come into our area if they are going to be paid less for the same type of surgery just because we are in a smaller community (so called "socio-economic" factor).

(III) Education and Training

(a) Our medical school costs were the same as the larger city physicians, or those remaining around medical schools.

(b) We are all either (1) members of the American College of Surgeons, (2) Board Certified or (3) Board eligible Surgeons.

(c) Thus we feel our surgery in this area meets the highest standards. We should not be paid **THIRD CLASS FEES**.

(IV) Some of the undersigned surgeons have had their fees "rolled back" by the present insurance carriers (both Prudential and Travelers) without prior notification or a hearing.

(a) Pilot Insurance for two years recognized a larger fee which we feel was an established policy.

(b) Efforts have been made to learn the reasons for the "roll back" and the fee scales allowed in other areas. We have been denied this information.

(c) Under such a secretive process discrimination is easy to perpetuate if a disparity of fees is allowed to continue.

(V) Under the Present method and "set up" the physicians in this area are helping to subsidize fees for "teaching centers," larger cities, and such high priced areas as California.

(a) The Medicare patient in this area pays the same \$4.00 per month as patients living in the above area. His or her Surgeon should be paid accordingly.

(b) If Medicare is going to continue to pay the Sur-

geon in this area less, then it would follow logic that the Medicare patients should not be required to pay \$4.00 a month the same as a patient residing in a large city or in a teaching institution area.

(VI) When Pilot Insurance was the intermediary there was a full time Medical Director and two assistant Medical Directors. This gave ample time for liaison between the Surgeon and the insurance carrier (third party) if there was a question of inadequate fees or overcharge for the type or magnitude of treatment the patient was receiving. Ever since Prudential took over as the intermediary on July 1, 1969, they have had only a part-time Medical Director whom we can seldom consult (because he isn't in his office).

Travelers (Charlotte Office) does not have a Medical Director for consultation and mediation. Thus the physician must take whatever the "insurance clerk" decides. Thus there is apparently little or no professional guidance. In other words, whatever is punched into the computer is final.

(VII) Finally, it is unfair for Surgeons in teaching institutions and larger cities to receive greater compensation for a given operation than a similarly qualified Surgeon in a smaller town. Actually the Surgeon in the teaching hospital spends much less time on his case than the small town surgeon. This is because all the menial and routine work is done for him by the interns and resident staff, whereas the small town Surgeon has to render TOTAL CARE, single handed, in many cases, to the patient.

Also, many of our small town Surgeons have been previously associated with teaching institutions. It seems unfair that their services should be worth considerably less if they move 40 to 50 miles away from the teaching hospital or from a large city into a medium size town or smaller community. One of the problems of distribution of medical care and personnel is the inducement of qualified physicians to locate in smaller areas.

It certainly is not conducive to superbly qualified physicians and Surgeons to locate in such an area knowing he or she will receive less compensation for their services in such a locality.

If any differential in fees may be necessary, it should be on the basis of the qualifications of the physician or surgeon rather than where he lives.

At present a general practitioner or poorly trained Surgeon in Charlotte or Greensboro would receive a larger fee for an appendectomy than a Surgeon in Salisbury or Mocksville with five years surgical residency training and a member of the American College of Surgeons or certified by the American Board of Surgery or other Surgical Specialty Boards.

The present compensation schedules could hardly be conducive to physicians to pursue a long residency training program in surgery or medicine if they realize its not their qualifications, but where they locate, that determines their professional fees.

Many of the undersigned have written several letters to the Prudential Insurance High Point office and also

have been in contact with the regional office in Atlanta, Georgia. As stated previously, there has been a refusal to correct a situation that we believe is inadequate and discriminatory.

The Supreme Court has recently ruled that even Welfare recipients are entitled to a hearing.

We believe for the above enumerated reasons we should be allowed the same surgical fees as those practicing in the larger cities and around teaching institutions.

The Rowan-Davie County Medical Society respectfully requests that the Medical Society of the State of North Carolina intercede in our behalf with the Social Security Administration and the two local insurance carriers for what we believe is discriminatory fee allowances in Medicare patients whom we treat in these two counties.

This will be referred to Reference Committee I.

Resolution No. 12 from Mecklenburg County Medical Society.

DR. LAWRENCE K. BOGGS: Boggs from Mecklenburg!

Resolution No. 12

Introduced by: Mecklenburg County Medical Society
Subject: Identification of prescription medications

WHEREAS, we consider the prompt identification of prescription medications is necessary to good patient care:

BE IT RESOLVED, that the Medical Society of the State of North Carolina go on record as supporting the labeling of all prescription medications as to trade name, concentration and quantity, unless the prescribing physician directs otherwise on each individual prescription.

BE IT FURTHER RESOLVED, that the North Carolina Pharmaceutical Association be informed of this action and be requested to implement this action.

SPEAKER OF THE HOUSE: This will go to Reference Committee II.

Resolution No. 13 is also from Mecklenburg County.

Resolution No. 13

Introduced by: Mecklenburg County Medical Society
Subject: Uniform pre-admission physical examination form

WHEREAS, a uniform pre-admission health evaluation and physical examination form would simplify and expedite the work of the physician:

BE IT RESOLVED, that the Medical Society of the State of North Carolina recommend to the Student Health Services, of the colleges and universities receiving support from the State of North Carolina, that they develop a uniform pre-admission health evaluation and physical examination form;

BE IT RESOLVED, furthermore, that the appropriate State Committees be charged with assistance and guidance in the development of this form.

SPEAKER OF THE HOUSE: Thank you.

This will go to Reference Committee I.

Resolution No. 14 was inadvertently not included in your pre-convention packet, for which I apologize.

It is available to you at your seat. Is there anyone who does not have a copy of Resolution No. 14 from Craven-Pamlico County Medical Society?

(No response)

Is there a representative to introduce this resolution?

DR. FRANK WHITLOCK: Whitlock of Craven County!

SPEAKER OF THE HOUSE: Thank you, sir.

Resolution: 14

Introduced by: Craven Pamlico County Medical Society

Subject: Vendor Payments Under Medicaid and Medicare

The Craven-Pamlico County Medical Society, being in an area of the state which is primarily rural and experiencing some difficulty in attracting new physicians and is concerned about the effect of varying pay scales under Medicaid and Medicare on the future distribution of physicians.

WHEREAS, the present level of coverage under Medicaid and Medicare is great and threatens to be extended to a larger and larger segment of the population, and

WHEREAS areas in and around larger centers of population have, at present, higher usual and customary fees; the establishment of separate and unequal vendor payments between different political or geographical areas will influence the decisions of future physicians in determining their site of practice, in general favoring those areas with present higher usual and customary fees to the detriment of other areas, which are predominantly rural, and already feel most sharply the pinch of the medical manpower shortage.

THEREFORE, we offer the following resolution to the House of Delegates of the North Carolina State Medical Society:

RESOLVED, that a uniform policy of vendor payments under Medicaid and Medicare be applied throughout the state regardless of any geopolitical boundaries.

This will go to Reference Committee I.

At this time, we will organize to nominate and elect a Nominating Committee and I would like to remind you those members of the Nominating Committee who are not eligible for re-election. As you will recall, the Constitution and By-Laws limits a term on this committee to two years and consequently, Dr. John Payne of the First District, Dr. Bruce Blackmon of the Fifth District, Dr. Joseph May of the Eighth District, Dr. Clyde Hedrick of the Ninth District, and Dr. Michael Keleher of the Tenth District are ineligible for re-election.

So, if you will now we will take about ten minute recess. If you will gather under your appropriate standard which is in place, and if one member will assume the responsibility of bringing to the podium on a slip of paper your nomination, please.

[There followed a fifteen minute recess for Caucus

by District.]

May we come back to order, please.

During the report of the Nominating Committee, the committee had actually chosen staggered terms for the Councilors and the Vice Councilors, but this was not announced to you and I will now ask the Chairman of that committee, Dr. Blackmon, to do so.

DR. BLACKMON: Thank you, Mr. Speaker.

I'll read from the minutes of that committee.

For one year, Districts 1, 4 and 6; for two year term, Districts 5, 7, 10; for three year term, Districts 2, 3, 8 and 9. These were chosen by lot before the names were presented.

Thank you.

SPEAKER OF THE HOUSE: Thank you, Dr. Blackmon.

I'll ask our Constitutional Secretary to read the results of the caucuses. These are nominations from the Districts for the Nominating Committee.

SECRETARY STYRON: Mr. Speaker:

First, Zack Owen; Second, Charles Nicholson; Third, Oliver Pruitt; Fourth, Tilgham Herring; Fifth, James Michener; Sixth, Jack Hughes; Seventh, William Ruby; Eighth, John C. Burwell; Ninth, William Long; Tenth, Kenneth Cosgrove.

(See later action page—, electing Dr. Roger Morrison as a member of the Nominating Committee from the Tenth District when it was learned that Dr. Kenneth Cosgrove was not eligible by virtue of having earlier been elected as Vice-Councilor for the Tenth District.)

SPEAKER OF THE HOUSE: These are only nominations and this committee has to be elected by the House, so the floor is now open for other nominations for the Nominating Committee.

If there are none, may I have a motion that these men be elected? [No response]

[The motion was made and seconded from the floor.]

All those in favor of electing this slate of nominees, please say "aye"; opposed "no".

They are elected.

SECRETARY STYRON: I should like for these nominees or rather elected members of the Nominating Committee to meet immediately with me in the Green Room and Dr. Harvey Estes, would you be there, too.

SPEAKER OF THE HOUSE: Thank you, sir.

I understand that Mr. Tom Sawyer, the AMA Field Representative for the Southeastern area is with us and if he's still here, I wonder if he would stand up so we might recognize him.

Mr. Sawyer, we're delighted to have you with us!

[Whereupon Mr. Thomas Sawyer, AMA Field Representative, Southeastern Area, stood up to be recognized.] [Applause]

There was one item which was overlooked in the report of the Executive Council and this has to do with a recommendation on Traffic Safety which emanated from the Committee on Community Health and I will read it:

Report W**REPORT OF THE EXECUTIVE COUNCIL**

Subject: Traffic Safety

Whereas deaths and injuries and property damage due to traffic accidents continue to be a major health problem in North Carolina;

And whereas these deaths are useless deaths and preventable;

And whereas the Medical Society in its responsibility to the people has gone on record previously as urging that steps be taken to curb these senseless accidents;

And whereas alcohol has been shown in numerous studies to be one of the leading causes for traffic deaths being involved in at least fifty percent of such deaths;

And whereas studies done in North Carolina have shown that in single vehicle crashes, sixty five (65) per cent of the operators killed were under the influence of alcohol, thirteen (13) percent had been drinking and only twenty-two (22) percent were sober;

And whereas it was likewise shown that in North Carolina of seventy (70) killed in multiple vehicle crashes, forty-one (41) percent were under the influence, nine (9) percent had been drinking and fifty (50) percent were sober; (see attached report)

And whereas it is apparent the use of alcohol by motor vehicle operators must be stopped if highway deaths are to decline;

And whereas there will continue to be deaths and accidents caused by alcohol until by legislative, law enforcement and judicial processes it becomes more comfortable to the motor vehicle operator to drive sober and safe than otherwise;

And whereas the removal of the drunk driver or alcohol using driver from our highways lies within the realm of and possibility of the Legislative bodies of the State of North Carolina;

Be it resolved that the Medical Society of the State of North Carolina as the body politic concerned with all of the health problems of North Carolina go on record and urge that the State Legislature, the body politic concerned with general and specific welfare of the citizens of North Carolina enact such legislation as will

- (a) aid in the apprehension of the alcoholic driver
- (b) prescribe the punishment of those driving while drinking
- (c) make it impossible for the courts to release the drunk driver to endanger the highways without proper rehabilitation.

Be it further resolved that a copy of this resolution be sent to each member of the General Assembly of the State of North Carolina.

This, as a report from the Executive Council, will be referred to Reference Committee II.

Our Parliamentarian has already caught us. Thank you, Dr. Hughes.

We have today elected Dr. Kenneth Cosgrove as Vice Councilor from the Tenth District and conse-

quently he is ineligible to serve on the Nominating Committee, so I will ask the Tenth District to please caucus immediately and give another nominee, whom we will then attempt to get elected.

DR. SHAFFNER: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: Can I rise to request information?

SPEAKER OF THE HOUSE: Yes, Sir!

DR. SHAFFNER: Dr. John Brockman handed to me a Statement of Policy on Occupational Health and he did not remember that this was referred as a resolution from the Executive Council to any Reference Committee. Can you clarify that please, sir?

Was one of the resolutions from the Executive Council going to a Reference Committee having to do with occupational health?

If not, this should go then, I feel, to one of the Reference Committees at this time, as submitted by the Committee on Occupational Health.

SPEAKER OF THE HOUSE: It did not come from the Executive Council as a report, as a lettered report.

DR. SHAFFNER: Not that I can find.

SPEAKER OF THE HOUSE: All right, would you please read the resolved of it and would you briefly state the substance of it, Dr. Shaffner—briefly!

DR. SHAFFNER:

It has to do with our cooperation in matters of occupational health.

Report V**REPORT OF THE EXECUTIVE COUNCIL**

Subject: Statement of Policy of the Medical Society of the State of North Carolina on Occupational Health

It is generally accepted that occupational health, in its broadest meaning, relates health to the circumstances of earning one's living; that health disorders may be either caused, aggravated, or revealed by employment; and that gainful employment is essential to the mental and physical well being of us all, leading to an achievement of self esteem and self reliance as well as providing as essential part of the education, rehabilitation, and vocational fulfillment of the individual. The Medical Society of the State of North Carolina recognizes that the health of workers constitutes the most precious asset of the structure of industry and of the economy of the community in general.

The Medical Society of the State of North Carolina further recognizes that the responsibility of physicians toward the health of the community encompasses care and concern on behalf of people at work. The Society recognizes that the practice of occupational health in a modern society does involve the participation of specialists and generalists of all walks of medicine and public health, in order to assure a coordinate and effective program of medical care and prevention.

Together with the traditional duties of physicians operating in industrial dispensaries, the contemporary doctor, both in general and specialistic practice, shares in the responsibility of preserving manpower necessary to the earning abilities of the work-

ers, as well as to the vital functions of industry. Occupational health is an inseparable component of comprehensive medicine and it is not limited to the exclusive concern of doctors practicing in industrial dispensaries. The limitation of facilities and of personnel directly available for occupational medical services, particularly in small type industries, and the merging of occupational medical problems into the wider area of environmental problems, together demand the attention of occupational medicine specialists as well as those practitioners not directly involved in industrial work.

The Medical Society of the State of North Carolina recognizes with pride the great progress of this State in industrialization during the past several decades and believes this to be a prelude to ever-increasing greatness of our State. The Society therefore, endorses efforts collectively and individually by its member physicians to meet the challenge of the changing industrial complexion of the State and encourages the use of the available resources and the abilities of individuals and agencies within the State for assistance in meeting these needs. Further, the Society supports and encourages efforts by the member physicians, industrial management, the working people, the North Carolina State Board of Health and the legislative bodies of the State directed toward an on-going program of health and safety for the working environment to all the citizens of the State.

The Medical Society of the State of North Carolina, fully aware of the pressing proportions of this matter:

1. Urges its members to provide increased professional support in behalf of the workers, industry, and the environment of the State as a good place to live and work.
2. Encourages development of programs designed to extend and improve occupational health services and facilities for the identification, treatment, and prevention of diseases as they relate to occupational or environmental characteristics.
3. Encourages expanded efforts to emphasize occupational health in the educational processes of medical students and practicing physicians, especially those engaged in industrial medical activity and consultation.
4. Supports the North Carolina State Board of Health in its efforts directed toward continuation, and improvement and expansion, of occupational health services as a function of the Occupational Health Section, State Board of Health; enactment of a Comprehensive Occupational Health Act for North Carolina; and up-grading and increasing staff and equipment of the Occupational Health Section to meet federal standards as may be enacted from time to time.
5. Encourages efforts by all State agencies and industrial management directed toward the betterment of the environment and safety of the individual at work.
6. Encourages physician participation in professional organizations concerned with occupational health.

SPEAKER OF THE HOUSE: Thank you, sir.

This will be referred to Reference Committee I.

In your prayers this evening, please remember both Reference Committees I and II! [Laughter]

It's necessary to re-open nominations for a member of the Nominating Committee from the Tenth District and the caucus has nominated Dr. Roger Morrison.

The floor is open for other nominations. Are there such?

[No response]

If not, may I have a motion that nominations be closed and that he be elected.

[The motion was made and seconded from the floor.]

The motion has been made and seconded.

All those favor this motion, please say "aye"; opposed "no".

Dr. Morrison is an official member of the Nominating Committee from the Tenth District.

Is there New Business to come before the House?

[No response]

If not, before we adjourn, again, may I request the members of all Reference Committees to please meet with me here at the podium, briefly, immediately following adjournment.

Is there a motion that we adjourn?

[The motion was severally made and seconded from the floor.]

All those in favor please say "aye".

We stand adjourned.

[The meeting adjourned at five twenty-five o'clock.]

TUESDAY AFTERNOON SESSION

May 19, 1970

The Second Meeting of the House of Delegates of The Medical Society of the State of North Carolina convened at two-thirty-five o'clock, Dr. James E. Davis, Speaker of the House, presiding.

SPEAKER OF THE HOUSE: May I ask that we please come to order.

May I ask that all delegates sit in the well of the hall, please.

It will be necessary for us to accurately ascertain the presence of a quorum and I'll ask Dr. Frank Jones and his Committee of Tellers to please count the delegates present and will ask Dr. Wilkerson to be ready in a moment to give us the number of registered delegates.

As you will recall, we have to have present for business a majority of those registered.

While Dr. Jones and the tellers are counting, I would just like to make a few brief announcements, if I may.

First of all, to express to you for your Speakers our sincere appreciation for your cooperation and your constructive spirit in which this House acted on Sunday and to give you our hope that we can continue today in that same spirit in order to get through what looks like an extremely long agenda.

Later, as we get the Reference Committee reports, may I please ask that you go over these reports carefully as items come up. If there is a matter on which you feel a strong desire to speak, please rise, go to one of the microphones and you will be recognized.

These committees met all of yesterday afternoon and most of what needs to have been said, I think, has been said and please don't misconstrue this as an effort to limit debate. We want everyone to say what is necessary to be said, but if it has been said in Reference Committee, please don't let's repeat it today.

Dr. Wilkerson, can you tell us how many delegates have been registered?

DR. WILKERSON: Mr. Speaker, We're working against a registration of 163.

DR. FRANK JONES: The Tellers' Committee finds 102 people sitting in the well.

SPEAKER OF THE HOUSE: Thank you, sir.

That constitutes a quorum and the House is now open for official business.

As we move immediately to consideration of Reference Committee reports, let me make one item abundantly clear and that is, that the report which this House has already received and which it now owns is the main motion that will be made, as we consider each item.

So, if the Reference Committee recommends disapproval and when you vote you will still be voting on the resolution, so if you want to follow the committee's recommendation then you vote against the resolution; you don't vote positively thinking you are supporting the committee in their disenchantment with the resolution. You are still voting on the resolution, so if you favor the resolution, or the substitute as they submit, vote in the affirmative, that you want to disapprove of the basic resolution, the main motion on the floor at that time, you vote negatively.

Dr. Carr!

VICE SPEAKER OF THE HOUSE: I would like now to call on Dr. Gilbert, Chairman, Reference Committee I, to a microphone, please.

These will be presented one by one of resolutions or reports and voted on after any debate from the floor.

At the conclusion, we will vote on the acceptance of the entire report, as amended, if there are amendments.

Dr. Gilbert!

DR. GILBERT: Reference Committee I submits to the House of Delegates the following report:

Resolution No. 2 introduced by Lincoln County Medical Society.

Subject: Physicians problem of paperwork on request from insurance companies and governmental agencies.

Your committee feels that the suggested plan is impractical and further that forms are already being revised; hence, we recommend disapproval.

VICE SPEAKER OF THE HOUSE: Thank you, Dr. Gilbert.

You have heard the report. This is the main motion. Is there any debate?

[No response]

To reiterate what your Speaker has said, you're voting on the resolution, not on the report; therefore, an "aye" vote signifies support of the resolution and a "no" vote signifies support of the Reference Committee.

I'll call for the vote, hearing no plea for debate.

All those in favor of sustaining the resolution say "aye"; opposed "no".

The "noes" have it. The resolution is not passed.

DR. GILBERT: Resolution No. 10 introduced by Rowan-Davie County Medical Society.

Subject: Fee schedule of the Industrial Commission.

We recommend substitution of the following in lieu of Resolution No. 10:

Be it RESOLVED that the Committee to work with North Carolina Industrial Commission be instructed to approach and negotiate with the new Chairman and the Commissioners of the Industrial Commission to utilize "usual and customary" fees in dealing with Industrial Commission cases.

Be it further RESOLVED it fruitful and satisfactory results are not achieved by January 1, 1971, that appropriate legal action be instituted.

We recommend that the amended resolution be adopted.

VICE SPEAKER OF THE HOUSE: The Chair recognizes the President who wishes to speak to the motion.

PRESIDENT BEDDINGFIELD: Mr. Speaker, Dr. Gilbert, I was not able to be in this Reference Committee when this resolution was introduced and I am in sympathy with the main sense of the resolution and the substitute resolution.

I would move to amend by deletion from the report of the Reference Committee the second resolved and I would like to explain that as follows.

We have made more progress in the last sixty days in our negotiations with the Industrial Commission along this line than we've made in the previous decade. Industrial Commission is in a state of flux. The man who had been Chairman for a good many years has retired and a new Chairman was appointed.

The Committee and President has made a visit to him which has been very productive, a good line of communication established, a full study of "usual and customary" has been begun and about the time that this got off the ground, the new Chairman received an appointment to the superior court bench and we have yet another new Chairman, so we had to start all over again. Our dialogue with him has just started.

But, it is in a very amicable climate and I believe a threat to take legal action by January 1, 1971 would impair those negotiations.

Thank you.

DR. SHAFFNER: Mr. Speaker, I second the motion to amend the amended resolution.

VICE SPEAKER OF THE HOUSE: Motion to amend by deletion has been made and seconded.

Is there any further discussion?

DR. GILBERT: Mr. Chairman, I believe the committee would accept the amendment.

VICE SPEAKER OF THE HOUSE: Did you hear the Chairman of the committee? His remark was he believed the committee would accept the amendment.

Is there any further discussion on the amendment?

[No response]

If not, we'll vote on the amendment.

All those in favor of the amendment, say "aye"; opposed "no".

The "ayes" have it. The amendment passes. The second resolved is deleted.

Now, we'll vote on the primary resolution. Is there any debate? [No response]

Is there any debate on the primary motion on the resolution as presented?

[No response]

To vote on the resolution, an "aye" vote sustains the recommendation of the committee.

All those in favor of this say "aye"; opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Resolution No. 13 introduced by Mecklenburg County Medical Society.

Subject: Uniform pre-admission physical examination form.

We recommend the following amended resolution:

WHEREAS, a uniform pre-admission health evaluation and physical examination form would simplify and expedite the work of the physician, be it,

RESOLVED, that the Medical Society of the State of North Carolina recommend to the registrars of all colleges and universities in the State of North Carolina that they adopt the uniform pre-admission health evaluation and physical examination form which has been recommended and approved by the Liaison Committee of the American College Health Association Liaison Committee and the American Medical Association and approved by the American College Health Association.

We recommend adoption of the amended resolution.

VICE SPEAKER OF THE HOUSE: You have heard the amended resolution.

The Speaker informs me it does not require a second as it has been seconded by the committee itself.

Is there any discussion of the amended resolution?

[No response]

You can attach to this a discussion of the original resolution if there is any pertinent to the amendment.

If not, we'll call for a vote on the amended resolution.

All those in favor of accepting the amended resolution say "aye"; opposed "no".

The amended resolution is adopted. There is no need for a vote on the original resolution.

DR. GILBERT: Resolution No. 1 introduced by Union County Medical Society.

Subject: Opposition of Medicare Law in general.

We recommend that this resolution not be approved.

VICE SPEAKER OF THE HOUSE: Is there any debate on the report of the committee?

[No response]

Again, may I remind you and perhaps this will be the last time I'll do so, that a vote "aye" sustains the resolution, a vote "no" sustains the report of the committee.

All those in favor of the resolution say "aye";

all those opposed "no".

The "noes" have it; the resolution is not adopted.

DR. GILBERT: Resolution No. 9 introduced by the Catawba County Medical Society.

Subject: Medicare and Medicaid Programs.

The committee recommends that this resolution be tabled.

VICE SPEAKER OF THE HOUSE: Motion for tabling is not subject to debate. A majority will pass it.

All those in favor of tabling, say "aye"; all opposed "no".

Hearing no "noes" we declare the resolution tabled.

DR. GILBERT: Resolution No. 11 introduced by Rowan-Davie County Medical Society.

Subject: Inadequate Medicare payments to surgeons of the Rowan-Davie area, and

Resolution No. 14 introduced by Craven-Pamlico County Medical Society.

Subject: Vendor payments under Medicaid and Medicare.

We recommend the following amended resolution as a substitute for Resolutions No. 11 and No. 14:

WHEREAS, we recognize and deplore the existing discriminatory inequities in vendor payments by the fiscal intermediary administering the Medicare Law in the State of North Carolina, and

WHEREAS, equally disturbing is that the precedent and trend so established will lead to increasing maldistribution of physicians with increasing shortages in rural areas, and

WHEREAS, we realize these inequities result from the necessity of these fiscal intermediaries to carry out the secretive guidelines imposed by the Department of Health, Education and Welfare; therefore, be it,

RESOLVED, that the Medical Society of the State of North Carolina be encouraged to utilize the existing standing committees (Committee on Medicare, Insurance Industry Committee and the Committee on Blue Shield) in seeking redress and/or guidance with their grievances, and be it, further

RESOLVED, that a uniform policy of vendor payments under Medicare be applied throughout the state regardless of any geopolitical boundaries, and be it, further

RESOLVED, that the Legislative Committee be instructed to express the Society's strong conviction that the secretive guidelines represent an unacceptable method of administration and that our Congressmen be urged to take appropriate action to relieve this intolerable situation.

We recommend the adoption of the above amended resolution.

VICE SPEAKER OF THE HOUSE: As you notice, Resolutions No. 11 and No. 14 have been amended by substitution of a completely new resolution on the subjects germane thereto.

Is there any debate on the amended resolution?

PRESIDENT BEDDINGFIELD: I'd like to speak to part of it.

VICE SPEAKER OF THE HOUSE: Mr. President wishes to speak on it.

PRESIDENT BEDDINGFIELD: The second resolved of the committee report—I'd like to bring to the attention of the House and raise the question. I'm not prepared to move or delete it or change it, but on reading this, where it says:

Be it further RESOLVED that a uniform policy of vendor payments under Medicare be applied throughout the state regardless of any geopolitical boundaries . . .

I realize the intent of this. This sounds awfully like a standardized fee schedule. We're on record through the years consistently as advocating "usual, customary and reasonable" fees and this might be construed to represent a reversal in long standing and generally accepted policy.

I simply bring this to the attention of the house for further consideration.

VICE SPEAKER OF THE HOUSE: I take it, sir, you're not proposing an amendment to the amended resolution.

PRESIDENT BEDDINGFIELD: Not at this time.

VICE SPEAKER OF THE HOUSE: Is there any further discussion of this amended resolution?

DR. SHAFFNER: Mr. Speaker!

VICE SPEAKER OF THE HOUSE: Dr. Shaffner, number two microphone!

DR. SHAFFNER: I'll go further than Dr. Beddingfield and move that the second resolved that he just read be deleted from the amended resolution.

VICE SPEAKER OF THE HOUSE: Is there a second to this motion to amend the amended resolution?

DR. BIGHAM: Second.

VICE SPEAKER OF THE HOUSE: It has been moved and seconded that the amended resolution from the committee be amended by delegation of the second RESOLVED.

Is there any debate or discussion on this amendment?

Dr. Gilbert!

DR. GILBERT: Dr. Beddingfield pointed out our intent was not along the lines that he feared and before going into that, I would say I would welcome, as everyone else would, a possible rewording if it may be suggested to not have the implications which Dr. Beddingfield and Dr. Shaffner have mentioned.

I do believe that some of the sense of our discussion yesterday, which proceeded for quite some time, there was no question in my mind that the body of those speaking among the doctors of the Society felt what we are deploring is the practice of the insurance carrier giving different returns for the same procedures.

One illustration was given yesterday of a pneumonectomy in a smaller community getting a fee of \$500 and in a larger community, \$1500 and this is also part of one of our WHEREASES that this would tend to keep doctors from going to smaller communities knowing they were going to get a smaller return for the same procedure.

And, this applies to medical practice as well as to surgery, so I think, and I think the other members of the committee would agree with me, that we would still like to see something expressing what I have said very poorly, succinctly perhaps as a substitute instead of deletion of this paragraph.

VICE SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: Mr. Speaker, I understand Dr. Gilbert's remarks and I think it is being considered as well as possible in our several committees: Insurance Industry Committee, Blue Shield Committee and Medicare Committee, and yet our making a positive statement in this way—I can't think of a substitute way of saying it better right now and rather than make a statement that may be construed the wrong way, I'd prefer to delete this section.

VICE SPEAKER OF THE HOUSE: Is there further discussion on this proposed amendment?

Dr. Crouch!

DR. ROBERT P. CROUCH: I would like to back up what Dr. Shaffner said and say that in the Blue Shield Committee, a great deal of time has been spent on this, inviting various people from the medical schools and inviting people from other areas to discuss this problem.

A great deal is being done and I'm afraid a general statement of this sort would defeat the work of a year of those working in our particular committee and perhaps the same thing is true in the other committees, too.

VICE SPEAKER OF THE HOUSE: A delegate here rose. Would you take the microphone, please.

DR. SAMUEL E. WARSHAUER: Warshauer, New Hanover County!

I thought perhaps we could substitute the one word in this resolution, instead of a "uniform" policy, use an "equitable" policy—a fair and equitable policy which is what everybody wants and that would solve the problem of a fee schedule implication and also pay for the services rendered, regardless of who rendered it if they have equal training and experience at the same time.

VICE SPEAKER OF THE HOUSE: Are you making a motion to that effect?

DR. WARSHAUER: I move the word "uniform" be changed to "equitable".

VICE SPEAKER OF THE HOUSE: This is an amendment of the second order. It's in order. Is there a second to it?

DR. STUCKEY: Second.

VICE SPEAKER OF THE HOUSE: It has been moved and seconded that the amendment be amended by substitution of the word "equitable" for "uniform".

Dr. Baker!

I'm calling for discussion, Dr. Baker!

DR. BAKER: I think you mentioned a teaching institution and a community hospital doing the same procedure. I think we sometimes forget the great differences in cost of items when we have a patient in a community hospital and having a patient in a nursing home which doesn't have anything to do with the

fee paid to a doctor in a teaching institution in a large center, where the doctors themselves through their own generosity are supporting training programs where the training program costs come under the department of surgery and the chief officers there get \$7,000 or \$8,000 a year.

These are very costly items that have nothing to do with procedures. A large part of that support comes from the staff fee that's collected. This costs more money to carry out surgical procedures where you have two or three assistants, you have them in the hospital around-the-clock, on the weekends, directing surgery.

I don't think this ought to be on the basis of fee, but on the services rendered.

VICE SPEAKER OF THE HOUSE: Thank you, sir.

Is there any further discussion of this amendment to the amended resolution?

PRESIDENT BEDDINGFIELD: Was there any further amendment?

VICE SPEAKER OF THE HOUSE: No, sir, not at this time. We have two amendments to the substitution.

Would you please, sir, get a little closer to the microphone than the other speakers have done? We're having difficulty in hearing the words.

Give your name, please!

DR. ROBERT C. MOFFATT: Dr. Moffatt from Asheville, North Carolina!

I move that we table all the substitutions to the resolution, amendments and the primary resolution.

VICE SPEAKER OF THE HOUSE: It has been moved that the amendments and the main motion to which they were attached be tabled.

This allows us no debate. It requires a majority.

Is there a second?

DR. JOHN T. ROPER: Roper from Charlotte!

I second.

VICE SPEAKER OF THE HOUSE: We'll vote on the tabling of the resolution and the amendments attached thereto.

All those in favor of tabling respond by saying "aye"; opposed "no".

The Chair will rule that the "noes" have it and the amendment is still open for debate. That's the second amendment to the amendment.

Is there any further discussion on the amendment to substitute by changing the word "uniform" to "equitable"?

Dr. Warren!

DR. JOSEPH B. WARREN: Dr. Warren from Craven-Pamlico County Medical Society!

We entered one of these resolutions. We've listened with great interest to the debate.

I would like to substitute a word in there and we would willingly accept that substitute word, but I think the amended amendment should stand otherwise—

VICE SPEAKER OF THE HOUSE: You speak then for the amendment, and the amendment to the amendment!

Is there any further discussion?

[No response]

If not, we'll vote on the last amendment offered which is the substitution of the word "equitable" for "uniform".

All those in favor respond by saying "aye"; opposed "no".

[There was one dissenting vote.]

This is declared carried.

We will now return to the original amendment to the amended resolution which was to strike out the second RESOLVED.

Is there any further discussion on this?

[No response]

If not, we'll call for a vote.

All those in favor of this amendment respond by saying "aye"; all opposed "no".

The motion is defeated to strike out the second RESOLVED.

VICE SPEAKER OF THE HOUSE: As it now stands, we are now back to the amended combined amendment of the original two resolutions as offered by the Reference Committee, with the second RESOLVED being voted on along with all the rest with a change in the word "uniform" to "equitable".

Any further discussion?

[No response]

If not, we'll call for a vote, on the resolution.

All those in favor of the resolution respond by saying "aye"; all those opposed to the resolution respond by saying "no".

[There were about three dissenting votes.]

I will rule that the "ayes" have it. The resolution is supported.

PARLIAMENTARIAN HUGHES: Mr. Chairman, point of order!

That is the resolution as amended, with "equitable" instead of "uniform"!

VICE SPEAKER OF THE HOUSE: That is correct.

The resolution, Mr. Parliamentarian, as amended. Since it has passed there is no need to consider the original two resolutions.

DR. GILBERT: Report "M" from the Executive Council.

Subject: Rate increase in professional liability insurance.

We recommend the approval of this report.

VICE SPEAKER OF THE HOUSE: You have heard the recommendation of the committee.

Is there any discussion?

[No response]

If not, we'll call for a vote.

All those in favor of the resolution, please respond by saying "aye"; all opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Report "H" from the Executive Council.

Subject: Reasonable professional fees to be paid for each patient by the third party payor under the Medicaid program.

We recommend approval of this report.

VICE SPEAKER OF THE HOUSE: You have heard the report of the committee, on the resolution.

Is there any further debate or discussion?

[No response]

Hearing none, I'll call for a vote.

All those in favor of the resolution as reported say "aye"; all those opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Report "F" from the Executive Council.

Subject: State of North Carolina urged to appropriate sufficient state funds to obtain maximum matching federal funds for Vocational Rehabilitation.

We recommend approval of this report.

VICE SPEAKER OF THE HOUSE: You have heard the report of the committee.

Is there any debate on this report and the resolution which was supported?

[No response]

If not, I'll call for a vote.

All those in favor of the resolution say "aye"; all those opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Report "G" from the Executive Council.

Subject: Need for local physicians to become involved in Regional Health Planning Councils.

We recommend approval of this report.

VICE SPEAKER OF THE HOUSE: Any debate or discussion on the resolution or the report?

[No response]

Hearing none, we'll call for a vote.

All those in favor say "aye"; opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Report "I" from the Executive Council.

Subject: Statement of Policy on Medical Aspects of Sports.

We recommend approval of this report.

VICE SPEAKER OF THE HOUSE: Any discussion on this report or the resolution pertaining to it?

[No response]

All those in favor say "aye"; opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Report "J" from the Executive Council.

Subject: Needed improvement in education of allied health personnel.

We recommend approval of this report.

VICE SPEAKER OF THE HOUSE: Any debate, any discussion?

[No response]

All those in favor of the resolution say "aye"; opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Report "L" from the Executive Council.

Subject: Committee on Relative Value Study Consideration of the 1969 California Relative Value Studies.

We recommend approval of this report.

VICE SPEAKER OF THE HOUSE: Any debate or discussion on this resolution or on the committee's report?

[No response]

If not, we'll call for a vote.

All those in favor say "aye"; opposed "no".

The "ayes" have it and the report is adopted and the resolution is adopted.

DR. GILBERT: Report "N" from the Executive Council.

Subject: Chiropractic Services under Medicaid.

We recommend approval of this report.

VICE SPEAKER OF THE HOUSE: Any debate or discussion on this resolution or the report?

[No response]

If not, all those in favor of the resolution say "aye"; opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Report "S" from the Executive Council.

Subject: Report of ad hoc Committee on Relationship of the Medical Society of the State of North Carolina to North Carolina Blue Cross and Blue Shield, Inc.

It was called to my attention today that there may be some misunderstanding. The report as presented by the Executive Council and reviewed by the Reference Committee recommended disapproval of the ad hoc committee report, so our Reference Committee in recommending after reconsideration of all the facts, approval of this report, in effect, disapproves of the ad hoc committee's report.

VICE SPEAKER OF THE HOUSE: I hope this is clear!

It is a little complicated. I'm going to ask Dr. Gilbert to restate again the last part of it so that you and I can both understand completely! [Laughter]

DR. GILBERT: To take it chronologically, the ad hoc committee made a report to the Executive Council in which the major recommendation was that a majority of physicians be on the Board of Trustees of the Blue Cross and Blue Shield, Inc.

The Executive Council—well, I have a correction in the audience!

DR. WILLIAM RABY: The recommendation was that a majority of physicians be on the Board relative only to Blue Shield matters.

DR. GILBERT: I stand corrected.

After discussion, the Executive Council voted to recommend disapproval of this ad hoc committee's report, so the Reference Committee approving the report signifies indirectly disapproval of the ad hoc committee report, just as the Executive Council recommended.

VICE SPEAKER OF THE HOUSE: The floor is now open for debate or discussion of the resolution and the report of the Reference Committee pertaining thereto.

DR. BOGGS: Boggs of Mecklenburg!

Would he please state again what the Reference Committee is recommending?

VICE SPEAKER OF THE HOUSE: May I state it for him and if I'm incorrect, he will correct me.

The Reference Committee is recommending disapproval of the original report of the ad hoc Committee

on Blue Cross and Blue Shield which emanated from the Committee—disapproval of the original and support of the action of the Executive Council. Is that correct?

DR. GILBERT: Yes, sir.

VICE SPEAKER OF THE HOUSE: Is there any discussion?

Dr. Hodges, I believe I will recognize first.

DR. HORACE H. HODGES: Mr. Speaker, I am Horace Hodges from Mecklenburg County.

I was unable to attend the Reference Committee in which it was considered.

I wish to speak in strong support of the original report of the ad hoc Blue Shield Study Committee to state once again, particularly with regard to its suggestions that appropriate changes be made, both constitutional and legislatively if necessary, to the effect that a Board of Directors be established on which practicing physicians would constitute a majority as related to Blue Shield matters and not to Blue Cross matters.

Now, despite the confidence which we have in our members who comprise the Executive Council and the members who served so unselfishly of their time on the Reference Committee, the members who represented so well the Blue Cross Blue Shield Board and on the Blue Shield Committee, this Reference Committee has, of course, concurred in the adverse recommendation and a matter of such importance, I think, really ought to be considered in depth by every delegate on this floor.

It has been called to our attention before that this House of Delegates is actually the governing body and is responsible for the affairs of the State Society and I would hope that each delegate here will consider this matter very seriously; consider the importance of government and third party influence on the practice of medicine; consider just for a moment government influences on fiscal agents.

Remember that the Senate Ways and Means Committee has just now for instance among other changes in the Medicare law included the recommendation that physician payments be pegged at the 1969 75th percentile through the fiscal year 1971 and already the 1969 physician payments are pegged at the January 1968 level by the administrative directive of Mr. Cohen when he departed office.

All of this strikes back at the inflation, cost-of-living index and so physician payments are being pegged.

Consider that the National Association of Blue Shield Plans is now able to obtain a greater and greater centralized control over the 72 now offered independent and autonomous state Blue Shield Plans and how can one escape the fact of life that regardless of what our mutual friendship has been between the Medical Society and the Blue Shield Plans that Blue Cross and Blue Shield is a business. It's a business with interest in insuring a commodity and that commodity is the delivery of medical service.

They can't be possibly be interested as much as we in the profession are in the problems that relate to the practice of medicine, the problems that relate to the

finances of the practice of medicine, so we can meet the best interest of our public.

I think any businessman would laugh with astonishment to learn that this group of some four thousand doctors would allow themselves to be out-represented in medicine, which is so vital to their own business operation.

We're not quibbling. We're not distrusting Blue Cross Blue Shield. I wish to point out the potential of control of medical practice by a third party already existing. It has been utilized but not completely, but it does exist in our present setup and Blue Cross is competing nationally for existence in growth and it's rather fierce competition.

Remember that compulsory national health insurance is a reality. It's going to be upon us in a few years, maybe just a few.

If this comes to pass, Blue Cross is going to have to be either in on the national health insurance, or they're going to have to go out of business and none of us thinks they're going to go out of business.

They're going to be in on it, in an administrative and fiscal capacity and they're going to be forced then into a situation of greater power, greater control over the practice of medicine. They could be a police arm of the Governor and I should think they would appreciate themselves having physicians take a greater share of that responsibility because that's not a responsibility of Blue Cross and Blue Shield.

It seems to be that we abdicate a responsibility if we allow this piece of business to pass as recommended by the Reference Committee.

VICE SPEAKER OF THE HOUSE: Thank you, sir.

Dr. Crouch, you rose at the same time.

DR. CROUCH: I will yield to Dr. Lymberis.

VICE SPEAKER OF THE HOUSE: You yield to Dr. Lymberis.

Dr. Lymberis!

DR. MARVIN N. LYMBERIS: I find it always to be difficult to be in disagreement with one of my good friends and colleague from Mecklenburg. I think there has been a great misunderstanding here.

The resolution as submitted by the ad hoc committee recommends the division of the Board.

Now, the Board of North Carolina Blue Cross and Blue Shield is a board established by charter. In order to change the Board in any manner, it would be necessary to call a general meeting of the subscribers to the services offered by the corporation and to receive an affirmative vote from them. It would then be necessary to receive approval of the Insurance Commission and approval to be granted for this reason.

Thirdly, if this would be, it would then be necessary to divide the corporation splitting the assets and liabilities, an undertaking of tremendous size.

But, more important than any legal entanglements or difficulties, is adoption of the recommendations of the ad hoc committee would not accomplish this desired purpose.

As things now stand, all Blue Shield matters as far as adjudication of any fees being paid to a doctor are one hundred per cent in the control of the Blue

Shield Committee, a committee not appointed by the Board of Blue Cross and Blue Shield, but elected entirely by the House of Delegates, so we have one hundred per cent control of Blue Shield administration.

Now, I would like to tell you something about the function of the Board and in the resolution, I remind you again, the recommendation is to change the Board.

The Board established overall policies. It does not administer Blue Shield matters.

Those of us who have been privileged to serve on the Board of Blue Cross and Blue Shield, without exception, have felt that our hospital administrator colleagues and more so, our public representatives in the main, constitute one of the finest bodies of representatives in the land; have been more than generous in regard to their doctor trustees.

They have listened attentively, have followed our advice on all matters pertaining to medicine and, in fact, we have separate meetings of the physicians and on no occasion has the Board ever denied a recommendation of the physician trustees.

Dr. Hodges spoke particularly of Medicare. This is not a Blue Shield function. We administer only the Part "A" which is hospital of Blue Cross Plans.

There will be plans we will be called upon to administer and in these plans there will be much not to our liking or to your hospital administrators or to the public members, but we are in no position to disobey a law. We do not approve of Medicare as physicians, but we have no choice but to administer it according to the statute of North Carolina.

But we do have this privilege. This is the only insurance company that has statutory incorporate physician representation. We actually have more than one-third. We elect one-third of the trustees, the hospital administrators elect one-third and the two of us together elect one-third from the public.

I know of no other insurance company where the voice of medicine is so strong in physician representation and while we may not be able to accomplish all the three ways or all the two ways, but where else can you get that representation?

Let me assure you that however dismayed at Medicare and Medicaid you may be, they do exist by law and there are many companies ready, willing and able to administer these programs. If we do not administer them, they will gladly do so.

At least with strong physician representation, we are in a bargaining position to modify and to moderate some of these programs that we find throughout the State.

I can see the acceptance of the recommendation of the ad hoc committee only as a means to weaken medicine representation, not to strengthen it.

I would urge you with all sincerity that the Executive Council recommendation for disapproval be accepted and that the original recommendation as written by the ad hoc committee be disapproved.

VICE SPEAKER OF THE HOUSE: Is there further discussion?

Dr. Raby!

DR. RABY: Raby from Mecklenburg.

I share the feelings of appreciation and respect for the members of this Society who have served on the Board of Trustees of North Carolina Blue Cross and Blue Shield, Inc.

I wonder if the onerous mention of the separation is actually recommended by the ad hoc committee. I think the recommendation was simply that as regards Blue Shield matters that a majority of that Board be made up of practicing physicians.

To my knowledge—and I'm open to correction—hospital saving and hospital care combined has single interest of NCBCBS, I don't believe there has to be a great deal of legal complexities to get this done.

I wonder if constituting the Board related only to Blue Shield matters and is as complex as Dr. Lymberis has told us. If it is I would like to know.

I still strongly favor a majority of physicians on any board that controls physicians' services and payments therefor.

VICE SPEAKER OF THE HOUSE: Dr. Crouch!

DR. CROUCH: I would like to partially at least answer to what Dr. Raby has said and then add one or two comments to Dr. Lymberis.

First of all, I have the report of the ad hoc committee in my hand. It says:

It therefore recommends division of the Board in such manner that the majority of the Board on Blue Shield matters be practicing physicians.

May I make one or two comments on this because I think it's very, very important now.

Just the past few days, our Governor of the State has said that physicians' services as applied by Medicaid, for example, must include chiropractics.

May I remind the group, that we are now writing certificates for dentists. I might also remind the group that the nursing association has asked for representation.

If we open up the Board of Trustees for physician service matters like that, we'll have to contend with the chiropractors wanting representation, the dentists wanting representation, the nursing association wanting representation, and I think, as Dr. Lymberis has said, we would be greatly weakening our position rather than strengthening it, if we follow the advice of the ad hoc committee.

I would further remind you that the Executive Council has discussed this at some great length and without a dissenting vote decided that the report of the ad hoc committee be disapproved.

Again, our Reference Committee, after considering all aspects of it, recommended disapproval of the committee's report.

I would heartily endorse this as I serve on the Board of Trustees now and, this past year, as Chairman of the Blue Shield activity. I have seen what has gone on and I think you would destroy many years of work by the Board and by the Blue Shield Committee, as elected by this body.

VICE SPEAKER OF THE HOUSE: Is there any further discussion?

Dr. Roy Bigham, I recognize!

DR. BIGHAM: Mr. Vice Speaker, I rise to reply to Dr. Raby's specific inquiry as to what legal steps might be necessary.

I will quote one sentence. I have asked our staff attorney to outline the legal steps that would be involved in the separation of Blue Cross and Blue Shield Board which are in summary as follows:

There follows more than one page of legal steps which would be involved. Dr. Lymberis has summarized these. One point he did not mention was that this process would involve the entire dissolution of Blue Cross and Blue Shield in North Carolina and the reconstitution of two separate corporations. This material is available if anyone wishes to go further into the specifics.

VICE SPEAKER OF THE HOUSE: You speak then for the report of the Reference Committee!

Dr. Shaffner, I recognize Dr. Hodges first.

DR. HODGES: Mr. Speaker, I can't be satisfied on a matter of this importance. If we had two Marvin Lymberises for every other member of the Board, or if we had two Dr. Crouches and two Roy Bighams and two Fleming Fullers and so, I'd be very happy. I'd have no concern.

I don't personally think that the difficulties of doing this outweigh the potential advantages. I admit there would be considerable effort.

I think however there might even be an easier way for our present physician Board members to be accorded greater voting strength and I would like to offer an amendment if such is in order, to the report of the ad hoc committee on the relationship of the Medical Society to North Carolina Blue Cross Blue Shield. Is that in order, sir?

VICE SPEAKER OF THE HOUSE: An amendment to the report of the Executive Council, as discussed and reported by the Reference Committee is in order.

DR. HODGES: Well, let me go on with my discussion.

There are ways in which the votes of various members of the Board can be weighted on one end or another. It would seem to me without any major reorganization it might be possible to accord our physician members a vote counting for perhaps a value of three, as opposed to the other members' vote being valued at one on matters relating to Blue Shield in which case there are eight physicians, eight hospital administrators, we would have then a twenty-four to sixteen advantage on Blue Shield matters.

It seems to me that this thing ought not to be just disapproved and dropped. There ought to be some way of increasing the physician responsibility on this Board.

VICE SPEAKER OF THE HOUSE: Dr. Hodges, there is a way to amend it if you wish to amend it.

DR. HODGES: It had been my purpose to offer this as an amendment to the committee's report, if such is in order. If it is in order, I would be happy to do so.

VICE SPEAKER OF THE HOUSE: It is in order to amend the report of Executive Council and the Reference Committee.

DR. HODGES: I would propose the amendment that it be considered and implemented if possible to give the physician members of the Blue Cross Blue Shield Board a vote of the magnitude of three to one on such matters as pertain to Blue Shield.

VICE SPEAKER OF THE HOUSE: This is an amendment by addition, as the Chair understands it, to the report. You're moving to disapprove the report of the Reference Committee and the Executive Council by substitution of your paragraph, to give the physician members a vote on the Board of Blue Cross and Blue Shield on the magnitude of three to one.

Dr. Shaffner, did you request the floor?

DR. SHAFFNER: I do not wish to discuss this amendment.

VICE SPEAKER OF THE HOUSE: Is there a second to this amendment?

DR. THOMAS L. DULIN: I second the amendment.

VICE SPEAKER OF THE HOUSE: The amendment has been made and seconded. It is now open for discussion.

Dr. Lymberis, the floor is yours!

DR. LYMBERIS: Mr. Speaker, may I remind you, you are offering an amendment to determine the course of action of a separate legal entity over which this House of Delegates has absolutely no legal rights, except through their elected representatives.

You cannot pass in this House of Delegates a rule that will give Lenox Baker three votes on the Board of Health any more than you can pass a rule to give me three votes on another corporation.

VICE SPEAKER OF THE HOUSE: I take it you're opposed to the amendment!

DR. LYMBERIS: I take the position that the amendment is out of order because it transcends the powers of this House.

VICE SPEAKER OF THE HOUSE: In the sense that this is the recommendation of the committee, the Chair will rule that the amendment is in order and you, of course, have a right to appeal the decision of the Chair.

PRESIDENT BEDDINGFIELD: I appeal the decision of the Chair!

VICE SPEAKER OF THE HOUSE: The decision of the Chair has been appealed.

PRESIDENT BEDDINGFIELD: I don't have a minute to explain my reasons do I?

VICE SPEAKER OF THE HOUSE: It is debatable! [Laughter]

PRESIDENT BEDDINGFIELD: Mr. Speaker, as I understand, the main motion before this House is the report of the Executive Council. This was delivered by me as President of the Executive Council to the House.

That report was referred to a Reference Committee. It has acted on it and brought it back. The amendment does not pertain to the main sense of the motion before the House which is to accept the motion for disapproval as advanced by the Executive Council.

And, because it does not bear on the main motion which is the main motion of Executive Council, I submit, sir, it's out of order.

VICE SPEAKER OF THE HOUSE: Any further discussion on the motion to overrule the Chair?

DR. KOONCE: Mr. Speaker!

VICE SPEAKER OF THE HOUSE: Dr. Koonce!

DR. KOONCE: I rise to support Dr. Beddingfield.

The amendment is an amendment theoretically to the report of the ad hoc committee which you are not discussing at the present time. You are discussing the recommendation of the Executive Council and therefore the amendment is out of order.

If they want to bring their amendment, the only way to do it is to defeat the present motion and then it reverts back to the recommendations of the ad hoc committee and then you can make all the recommendations you want.

VICE SPEAKER OF THE HOUSE: I will now ask the House to vote on the motion of overruling the Chair.

If you vote to overrule the Chair, you will say "aye"; if you sustain the Chair you will vote "no".

All those in favor say "aye"; all those opposed "no".

The Chair is overruled. The amendment is out of order. We will return now to a discussion of the report.

Dr. Dulin!

DR. DULIN: I move to table the action of the Reference Committee.

VICE SPEAKER OF THE HOUSE: It has been moved to table the action of the Reference Committee, which in a sense moves to table the report of Executive Council.

Is there a second?

[The motion was seconded from the floor.]

It has been seconded.

All those in favor of tabling say "aye"; opposed "no".

The Chair rules that the "noes" have it. The amendment is still open for discussion.

The question has been called.

Dr. Shaffner!

DR. SHAFFNER: May I discuss the main motion?

VICE SPEAKER OF THE HOUSE: Yes, sir.

DR. SHAFFNER: One more item that was not mentioned.

It is my firm belief that the Blue Shield Committee has, by an understanding, complete charge of the Blue Shield aspects of Blue Cross and Blue Shield and that the physician trustees will accept and urge the Board to accept this and the Statement of Understanding so says.

Now, to add a further thing that has not been said, if you ever separate this Board where one part takes care of Blue Shield and one part takes care of Blue Cross, then we won't have much say so and we must remember that Part "A" of Medicare now has Blue Cross but it does affect you because you put the patient in the hospital and if they decide in any way they are going to limit your patient's stay in the hospital, it's going to affect you and the way it is now, your physician trustees have as much voice

as have the hospital folks on how they feel.

Therefore, I would vote to sustain the Reference Committee.

VICE SPEAKER OF THE HOUSE: Any further discussion?

Hearing none, the Chair will call for a vote.

Again, the vote "aye" will register disapproval of the change in the Board, in essence, and a vote "no" is approval of the change in the Board as suggested by the ad hoc committee.

All those in favor of the report say "aye": all those opposed "no".

The Chair rules the "ayes" have it and the resolution is adopted.

There is one more which I hope you have. It was introduced late Sunday, entitled "V", report of the Statement of Policy of the Medical Society of the State of North Carolina on occupational health.

DR. GILBERT: Report "V" from the Executive Council.

Subject: Statement of Policy of the Medical Society of the State of North Carolina on occupational health.

We recommend approval of this report.

VICE SPEAKER OF THE HOUSE: Is there any discussion of this report?

[No response]

If not, we'll call for a vote.

All those in favor say "aye"; opposed "no".

The "ayes" have it and the resolution is adopted.

DR. GILBERT: Having swept through the labors of the Reference Committee, I don't want to leave without expressing my thanks to the other committee members, to all the people who came before our committee and instructed us tremendously and also to the secretarial staff which has been a great help, and lastly, to you all in the House of Delegates.

Thank you. [Applause]

VICE SPEAKER OF THE HOUSE: Mr. Chairman and the members of your committee, the Speaker and the Vice Speaker thank you for the work you have done.

It is now in order and I'll entertain a motion to accept the report of Reference Committee I.

[The motion was made and seconded from the floor.]

It has been moved and seconded.

All in favor say "aye"; opposed "no".

The whole report is accepted with thanks.

SPEAKER OF THE HOUSE: I commend Dr. Carr for a very commendable job and to thank again too, the Reference Committee for such excellent work.

We will now move on to Reference Committee II and ask Dr. Larkin to approach the podium down below so we both might have a microphone at the same time.

Just to clarify the point, when a Reference Committee submits a substitute motion, there being at least two members, two delegates on this committee, this constitutes a motion and a second, so we have not bothered to ask for the seconding of this.

I would also ask that if you desire to speak, approach one of the three microphones and stand and you will be recognized promptly and I think we might

save some time.

Dr. Larkins!

DR. LARKINS: Mr. Speaker, Reference Committee II submits to the House of Delegates the following report:

Report "A" from the Executive Council.

Subject: Purchase of Greenfield Property next to the presently owned property on which the headquarters building is now being constructed.

It has been found obligatory to the construction of the headquarters building that this property be acquired. The committee recommends approval of this report.

SPEAKER OF THE HOUSE: Report "A" has been properly moved and seconded for acceptance.

Is there any discussion?

[No response]

If not, those favoring acceptance of this report, please say "aye"; opposed "no"

The report is approved.

DR. LARKIN: Report "B" from the Executive Council.

This is in the nature of a progress report on action relating to reorganization of the headquarters staff previously directed by the House of Delegates and the committee recommends approval of this report.

SPEAKER OF THE HOUSE: Are there any questions or discussions about Report "B"?

[No response]

If not, those favoring approval please say "aye"; opposed "no".

It is approved.

DR. LARKIN: Report "C" deals with insurance coverage for Society officers, Executive Council members, staff, committee members while on official travel for the Society.

We recommend approval of this report.

SPEAKER OF THE HOUSE: Any discussion of this report?

[No response]

If not, those favoring approval of the report please say "aye"; opposed "no".

It is approved.

DR. LARKIN: Report "D" has to do with membership in the State Medical Society for those osteopathic physicians duly licensed by the North Carolina State Board of Medical Examiners.

Adoption of this report requires no change in our Constitution and By-Laws. The committee recommends its approval.

SPEAKER OF THE HOUSE: Is there discussion of report "D"?

[No response]

If not, those favoring acceptance please say "aye"; opposed "no".

It is accepted.

DR. LARKIN: Report "E" has to do with the policies of the Crippled Children Division of the North Carolina State Board of Health.

This committee recommends that the action of the Executive Council in this matter be approved.

SPEAKER OF THE HOUSE: Is there discussion of

Report "E"? [No Response]

Those in favor of approving this report, please say "aye"; opposed "no".

The report is approved.

DR. LARKIN: Report "O" has to do with the acceptance of cigarette advertising in the North Carolina Medical Journal.

The Executive Council, without dissent, adopted a motion that the Journal continue to accept cigarette advertising. The committee recommends the approval of this report, recognizing that the acceptance of advertising does not necessarily constitute endorsement of the advertised product.

SPEAKER OF THE HOUSE: Is there any discussion on Report "O"?

[No response]

If not, those favoring approval, please say "aye"; opposed "no".

[Several dissenting votes were heard.]

The Chair rules that it is approved.

DR. LARKIN: Report "P" has to do with Termination of Pregnancy (from the Executive Council). This resolution is introduced from the Committee on Mental Health.

In view of present laws and pending litigation, the committee recommends rejection of this resolution.

SPEAKER OF THE HOUSE: Is there discussion?

Yes, sir. Would you please approach a microphone.

DR. ROPER: Dr. Roper from Mecklenburg!

First, I would like to remind the delegates that those of us in attendance at the Reference Committee found only one spokesman who spoke about opposition to abortion as a procedure. The remainder of the discussion centered around the wording of the policy statement as provided by this committee.

I would like to ask if it's proper to make an amendment to the committee's recommendation.

The committee's recommendation says "... in view of present laws and pending litigation, the committee recommends rejection of this resolution."

I would like to ask if this could be replaced by the following policy statement. This policy statement to read:

The North Carolina Medical Society recommends that existing abortion laws be rescinded and decisions regarding termination of pregnancy become and remain a medical decision between the physician and the patient.

And, I would like to submit in discussion of my proposed amended—

SPEAKER OF THE HOUSE: Wait just one moment!

May the Chair have a copy of that amendment, please, and is there a second to this amendment?

DR. BOGGS: Second.

SPEAKER OF THE HOUSE: May we have a copy of that and then the floor will be opened for discussion.

Do you have it written out?

PARLIAMENTARIAN HUGHES: Mr. Chairman, I suggest this negates the original proposal, if I heard it correctly. I'd be glad to discuss it further.

SPEAKER OF THE HOUSE: Yes, we will ask Dr.

Roper to read that again. Dr. Roper, will you use that microphone, right there by Dr. Larkin?

DR. ROPER: The addition to the committee recommendation reads:

The North Carolina Medical Society recommends that existing abortion laws be rescinded and decision regarding termination of pregnancy become and remain a medical decision between the physician and the patient.

SPEAKER OF THE HOUSE: That proposed amendment has been seconded.

Is there further discussion?

Dr. Roper!

DR. ROPER: I would simply like to add in support of this amendment that abortion as a procedure is not an issue in question here. The Legislature speaking as the elected body for North Carolinians has recommended abortion is a medical procedure.

There are certain limitations imposed by our current legislation. It is not the purpose, nor intent of the Legislature to act as a restricting body regarding when special procedures should be done or whether it should be accomplished.

This is a medical decision. It is a decision that should be encompassed with the patient and her particular needs and her chosen physician.

It is long overdue that we have a policy statement for which our legislators can look to this body for guidance and it's with this, I recommend it.

SPEAKER OF THE HOUSE: Dr. Roper, the Chair understood you to say you are speaking for the report, with this addition.

DR. ROPER: Yes.

SPEAKER OF THE HOUSE: So, all of you have a copy of the Report "P".

Is there any further discussion of the amendment which would add to the report as published?

Yes, sir! Approach that microphone, please.

DR. WILLIAM L. CLARK, Jr.: Clark from Catawba!

As I see it, this gives license to any individual physician who sees fit to perform any kind of abortion which looks like to me is a little too loose.

I would hate to see this body going on record supporting something of this nature. Perhaps we do need some restraint somewhere. If this were the whole group who were acting as a body, I would go along with that, but this leaves it up to the individual physician.

I would go on record as against this amendment.

SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: Mr. Speaker, would it be in order to have our legal counsel, Mr. Anderson, speak to the possible implication of such an action on our part.

Mr. Anderson mentioned to me last night the dangers of making such a particular statement.

SPEAKER OF THE HOUSE: Mr. Anderson!

MR. JOHN ANDERSON [Legal Advisor of the Society]:

This amendment does not essentially change the original proposal of the committee which says that

termination of pregnancy shall not be regulated; it shall be the personal choice of the woman. This adds "and of the physician" in some way.

The amendment doesn't seem to be too intelligible even when coupled with the original proposal. The original proposal would lay down no restrictions, would draw no line between the interruption of pregnancy in any period of the pregnancy before birth. It raises serious legal implications and whether or not this Society would want to get into that subject, that is your prerogative, but what you are proposing in the way of laws or amendment to the law of the state is not intelligible from either one of these, either the original proposal of the committee or the amendment.

SPEAKER OF THE HOUSE: Thank you, Mr. Anderson.

Is there further discussion?

Now, as the Chair understand this and I think as Dr. Roper has confirmed it, the report that contains the statement: "Although presently regulated to some extent by laws, the Medical Society of the State of North Carolina believes that the initiation, continuation or interruption of pregnancy is a personal responsibility of each woman."

Any health problem arising out of pregnancy is a concern of the pregnant woman and her chosen medical doctor."

Now, Dr. Roper has suggested an amendment which would be added to this statement. Your Reference Committee has recommended rejection of the statement I just read.

Is there further discussion of Dr. Roper's amendment?

DR. PHILIP H. PEARCE: Mr. Speaker!

SPEAKER OF THE HOUSE: Yes, sir. Would you identify yourself.

DR. PEARCE: Pearce of Durham!

I'd like to make a few comments and perhaps this will make what I have to recommend a little more intelligible, in light of Mr. Anderson's comments.

I believe that no woman should be forced to bear an unwanted child. A woman should be entitled to have an abortion legally if she decides this is the only solution she has, and if the physician agrees it is in the best interest of the mother and her child, she should be encouraged to seek the best solution and spiritual help available before reaching a decision and the physician for his own support should have the opportunity to confer with colleagues of his choosing, if he feels the need for such consultation.

Believing that abortion should be subject to the same regulations governing medical and surgical procedures, I urge the repeal of laws limiting the circumstances under which a woman may have an abortion and a physician the freedom to use his best professional judgment in performing them.

I believe that no physician should be forced to perform an abortion, but he has an obligation to refer the patient to an individual physician who will serve her.

With regard to the ever-staggering problems of overpopulation, environmental pollution, unfavorable home

environment which leads to unstable individuals which contributes to our appalling crime rate, I feel therefore the only laws to allow an abortion be resolved between a patient and her physician.

And, I would point out the medical, psychiatric, moral, spiritual and rehabilitative complications.

At least one legislator and some physicians are now working in this state to amend our present law and make it more in line with Hawaii's law, New York and other states. These men now need our support.

I therefore move, if I may, that the original resolution as forwarded from the Executive Council to Reference Committee as Report "P" be accepted and be amended only as follows: Delete the last sentence—

SPEAKER OF THE HOUSE: Sir, you are out of order, now. We are discussing only Dr. Roper's amendment and although the substance and the main report are similar, we allowed you to go on, but now let's hear this amendment if we may, unless you want to amend his amendment. You may do that.

DR. PEARCE: I think it would be simpler to ask him, if I could, to rescind his amendment and perhaps repeat it because they are similar, but ours is a little better! [Laughter]

SPEAKER OF THE HOUSE: Well, perhaps you can get with him, while we go on, but you're out of order with your other motion.

Sir, do you intend to speak to the amendment?

DR. THOMAS E. ROSS: To, Ross, Richmond County!

On the amendment that is offered, it seems to me this deprives the fathers of the children being born, or eliminating the prerogative as to whether that child should be carried or not in that it rests strictly in the hands of the wife and her physician.

SPEAKER OF THE HOUSE: Dr. Shaffner, do you wish to speak to the amendment?

DR. SHAFFNER: Mr. Speaker, may I hear the amendment? I think it was to recommend we abolish the laws, was that it?

SPEAKER OF THE HOUSE: The North Carolina Medical Society recommends that existing abortion laws be rescinded—

DR. SHAFFNER: I think this is true, but if it's not, you can rule me out of order.

If we rescind all laws on abortion, which includes abortion that might be criminal, then anybody can perform an abortion and would be liable only to the practice of medicine which is a crime and what's the maximum penalty? \$50 or thirty days in jail, right!

Because if there are no laws on the books to perform an abortion, anybody could perform it whether they're a doctor or not and the only thing you can do to him is to fine him \$50 or thirty days in jail and this is just unacceptable to me and I think it will be unacceptable to you if you understand it because it will just open the thing up.

SPEAKER OF THE HOUSE: I gather you're speaking against the amendment.

Is there any other discussion directly related to the amendment?

If there is no other discussion, we will now vote on

Dr. Roper's amendment. Is there any question about its content? [No response]

If not, those favoring the acceptance of this amendment please say "aye"; opposed "no".

The amendment has been defeated and we're now back to Report "P" from the Executive Council and your committee has recommended rejection.

Dr. Pearce!

DR. PEARCE: Since we are not making laws here, but merely a policy statement that reflects our thinking I would like to move that the original resolution as forwarded from the Executive Council to the Reference Committee, Report "P", be accepted and amended only as follows:

Delete the last sentence of the resolution and substitute the sentence:

Laws pertaining to termination of pregnancy should be modified so that the decision is the responsibility of the woman and her physician.

And, I would suggest if you want to put a time limit on it, you make it that this could be performed until 24 weeks gestation.

SPEAKER OF THE HOUSE: Is that your desire to add that last phrase?

DR. PEARCE: To this body, yes, sir.

SPEAKER OF THE HOUSE: Is there a second to this proposed amendment?

DR. ROPER: Second.

SPEAKER OF THE HOUSE: The amendment is open for discussion and we would appreciate a copy of it.

[No response]

If there is no discussion, we will now vote on this amendment.

[There followed a request from the floor to read the amendment.]

Yes, sir, I will.

The amendment proposes that the last sentence of the report which says:

Any health problem arising out of pregnancy are a concern of the pregnant woman and her chosen medical doctor.

That that be deleted and that in its stead, the statement:

Laws pertaining to termination of pregnancy should be modified so that the decision is the responsibility of the woman and her physician until 24 weeks gestation.

DR. BAKER: I would modify that to the patient and her physician.

SPEAKER OF THE HOUSE: Is the responsibility of the patient and her physician.

DR. BLACKMON: Does that mean medical doctor because there's a lot of competition from the chiropractic group.

SPEAKER OF THE HOUSE: Did you intend medical doctor?

DR. PEARCE: Medical doctor, yes.

DR. BAKER: I hope I'm not out of order, but if this passes, I suggest we adopt this preamble which should be read before you make it as a public report, to include it in some way in order to clarify why

we're doing that.

SPEAKER OF THE HOUSE: I accept that as a suggestion from you.

DR. ARTHUR: I rise for a point of order, sir.

Is this question now before the courts of North Carolina, sir?

SPEAKER OF THE HOUSE: I'm told it's before the federal court, but not before the state court.

DR. ARTHUR: It's before superior court. There's a case pending and the object of this, according to a representative from the Bowman Gray School of Medicine, Department of Obstetrics and Gynecology, is to see that some abortions are done in North Carolina outside of the three teaching hospitals. Apparently, these are about the only places doing them now.

While I'm standing, I might as well—

SPEAKER OF THE HOUSE: Would you please go to a microphone and identify yourself for the secretary, please, sir.

DR. ARTHUR: I'm Robert Arthur from Guilford County. I'm a gynecologist. I'm one of the people who developed funds to do the work on this.

I think the Reference Committee report has got to be accepted for the simple reason we're interfering with something in which we have no business, which is before the courts and I think the new motion should be defeated.

SPEAKER OF THE HOUSE: Yes, sir!

DR. ROPER: It is before the courts and a decision will be rendered regarding it this year. A policy statement from this organization would lend credence of the North Carolina Medical Society to the position as it's not our intent to abandon laws here, but simply to add the weight of the House of Delegates to what the courts are considering in weighing their decision.

SPEAKER OF THE HOUSE: If there's no other discussion—please don't raise your hand if you want to speak, but approach one of the microphones. Microphone number three!

DR. CLARK: It looks like to me that we are being rather hasty in trying to pass something that we have not studied. We've already had several positions taken and now the indefinite time of 24 weeks is advocated. This is open to a lot of difficulty.

It looks like to me we're trying to meddle with something that is a moral question that we should not work too loosely with. This resolution is real indefinite and it looks like to me that this body, before it gets too radical—we're a conservative group of people and before it gets too radical, should give this more study and I speak in support of the Reference Committee in turning down the original resolution and also the substitute.

SPEAKER OF THE HOUSE: If there is no other discussion, of this amended motion of Dr. Pearce which you have heard, I'll call for a vote.

Those favoring the amendment, please say "aye"; opposed "no".

May we please have a standing vote. The tellers would count for us if you will.

Those favoring the amendment, please stand!

[There followed a count of the standing votes.]

Thank you. Will you now please be seated?

Those now opposed to the amendment, please rise! [There followed a count of the standing votes.]

Will you now please be seated?

Dr. Jones!

DR. FRANK JONES: Mr. Speaker, the tellers report as follows: For the motion, 51; 57 against.

SPEAKER OF THE HOUSE: 51 for the amendment and 57 opposed.

The amendment fails. We are now back to consideration of Report "P". Is there any further discussion of the report?

If you vote "aye" on acceptance, you accept the report as published by the Executive Council. If you vote "no" then you are voting for the recommendation of the Reference Committee and against the report.

Is there any misunderstanding about that?

If not, we will now vote; those favoring acceptance of report "P" from Executive Council please say "aye"; those opposed to acceptance of the report please say "no".

May we please have a standing vote!

Will those favoring acceptance of Report "P" please rise?

DR. BLACKMON: Sir, would you give us time to go back and see what our Report "P" calls for, or very briefly tell us what we're voting on?

SPEAKER OF THE HOUSE: I will read it to you.

Although presently regulated to some extent by laws, the Medical Society of the State of North Carolina believes that the initiation, continuation, or interruption of pregnancy is a personal responsibility of each woman. Any health problems arising out of pregnancy are a concern of the pregnant woman and her chosen medical doctor.

You're voting for that with an "aye"; you're voting against that with a "nay".

DR. WELTON: Mr. Speaker, has discussion ended?

SPEAKER OF THE HOUSE: Yes, sir. A vote has been called for.

Those who favor acceptance of this report please remain standing.

[There followed a count of the standing votes.]

Will you please be seated?

Those against acceptance of the report please stand.

There followed a count of the standing votes.

Will you please be seated?

Dr. Jones, are your tellers ready?

DR. FRANK JONES: Mr. Speaker, your tellers find 66 for the motion, 44 against the motion.

[Applause]

SPEAKER OF THE HOUSE: The motion carries and Report "P" is accepted.

Dr. Larkin!

DR. LARKIN: Report "Q" from the Executive Council.

This report has to do with the status of nursing education. Its purpose is to advance the educational processes of nursing in the state and would create a central agency through which all nursing groups could coordinate their educational activities.

The committee recommends approval of this report.

SPEAKER OF THE HOUSE: Is there any discussion of Report "Q"?

[No response]

If not, those in favor please say "aye"; opposed "no".

It is accepted.

DR. LARKIN: Report "R" from the Executive Council.

This report has to do with physicians' assistants and endorses a concept which has promise of providing additional medical manpower.

The Committee recommends adoption of this report and further recommends that, within the State Medical Society, a Committee on Emerging Medical Manpower be created.

SPEAKER OF THE HOUSE: The Chair will rule that the last paragraph contains an amendment to the original report—

DR. LARKIN: This is just a recommendation.

DR. SHAFFNER: Mr. Speaker!

SPEAKER OF THE HOUSE: All right.

DR. SHAFFNER: May I ask the Reference Committee if they would be willing to strike that recommendation so that we could vote on adoption of the report?

SPEAKER OF THE HOUSE: Dr. Larkin!

DR. LARKIN: Yes, sir.

SPEAKER OF THE HOUSE: He has accepted that and so when we vote, we will vote to accept or reject Report "R". The recommendation will not be included.

Is there any discussion?

[No response]

If not, those favoring acceptance of Report "R", please say "aye"; opposed "no".

It is accepted.

DR. LARKIN: Report "T". This report is introduced by the Executive Council and has to do with furnishing of the new headquarters building through voluntary donations.

The committee recommends that this report be approved.

SPEAKER OF THE HOUSE: Is there discussion?

[No response]

Those favoring approval, please say "aye"; opposed "no".

It is approved.

DR. LARKIN: Report "U". This is introduced by the Executive Council and has to do with a request from a commission established by the General Assembly for a "position paper" from the Society on the problems of emotionally disturbed children in our State. The "position paper" attempts to more fully coordinate the activities of those committees and boards concerned.

The committee recommends approval of this report.

SPEAKER OF THE HOUSE: Is there discussion?

[No response]

If not, those favoring approval of Report "U", please say "aye"; opposed "no".

It is approved.

DR. LARKIN: Report "W". Resolution from Committee on Community Health concerning traffic safety.

This is in regard to the problem of the drinking driver. The committee recommends the approval of the following amended resolution:

Be it,

RESOLVED, that the Medical Society of the State of North Carolina urge the General Assembly of North Carolina to enact such legislation as will strengthen the laws designed to keep the driver who is under the influence of alcohol or drugs off the public highways.

The committee recommends approval of this resolution.

SPEAKER OF THE HOUSE: So, a substitute resolution has been properly made and seconded by this Reference Committee.

Is there discussion of this substitute resolution?

PARLIAMENTARIAN HUGHES: Point of order!

Is this amended or a substitution?

VICE SPEAKER OF THE HOUSE: Amended by substitution!

SPEAKER OF THE HOUSE: It's really a substitute in that we will not vote on the other if this passes.

DR. CLARK: Mr. Chairman!

SPEAKER OF THE HOUSE: Microphone number three!

DR. CLARK: May I ask the Reference Committee why this amendment was made. The original looks pretty good to me.

DR. LARKIN: Well, we felt the question of drug complications should also be considered in this regard and that's why we recommended people under the influence of alcohol and drugs and also, that the original resolution encompassed a little too broad a field.

SPEAKER OF THE HOUSE: Are there further questions or discussion?

Microphone three!

DR. WILLIAM H. KNEEDLER: Dr. Kneedler, Cabarrus!

The police have told me that drugs are included now.

SPEAKER OF THE HOUSE: Is there further discussion?

This will be held as a substitute resolution. If you adopt it, then we will not vote on the original resolution.

Those who favor adopting the substitution resolution please say "aye"; opposed "no".

[There were several dissenting votes.]

The substitute resolution is accepted.

DR. LARKIN: Resolution No. 3 introduced by Harnett County Medical Society.

Subject: Shortage of medical personnel serving communities in North Carolina.

The committee recommends adoption of this amended resolution:

Be it,

RESOLVED, that the Medical Society of the State of North Carolina request the Governor to name a commission whose purpose will be to seek means to improve the distribution of physicians, with particular emphasis on securing more general practitioners to locate in rural communities. The State Medical Society offers its fullest cooperation in any way possible.

SPEAKER OF THE HOUSE: This is action on a substitution resolution. Is there discussion of it?

DR. BLACKMON: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Blackmon!

DR. BLACKMON: Dr. Blackmon from Harnett County.

I am grateful that the committee has gone along with the thinking of Harnett County that something needs to be done. I do feel that the original motion has been weakened and we would like to see that the original be carried forward.

There is an addition that needs to be made to either the original or the substitute that the committee has given which I think will not change the full meaning.

I would recommend the amendment to either the original or the substitute, whichever is taken, and that the Governor be asked to fund such a commission adequately to carry out the purpose of the commission.

SPEAKER OF THE HOUSE: You're proposing that as an amendment to the substitute motion.

DR. BLACKMON: Or the original, whichever we adopt.

SPEAKER OF THE HOUSE: The substitute is the only one under consideration at the moment.

DR. BLACKMON: Thank you.

SPEAKER OF THE HOUSE: Is there a second to Dr. Blackmon's suggested amendment to the substitute motion?

[The motion was seconded from the floor.]

May we please have a copy of that, Dr. Blackmon?

Is there discussion of his suggested amendment?

Would you like to hear it again? [No response]

If not, those favoring acceptance of this amendment please say "aye"; opposed "no".

The substitute motion is now amended.

Is there further discussion of the substitute motion as amended?

[No response]

If not, those favoring the substitute resolution as amended please say "aye"; those opposed "no".

[There were a couple of dissenting votes.]

The motion is carried.

Dr. Larkin!

DR. LARKIN: Resolution No. 4 introduced by the Executive Council.

Subject: Environmental Pollution.

The committee recommends the approval of this resolution.

SPEAKER OF THE HOUSE: Is there discussion concerning Resolution No. 4?

[No response]

If not, those favoring approval please say "aye"; opposed "no".

It is approved.

DR. LARKIN: Resolution No. 5 introduced by the Executive Council.

Subject: Pesticides.

The committee recommends approval of the following amended resolution:

Be it,

RESOLVED, that the Medical Society of the State of

North Carolina go on record as recommending the immediate cessation of the use of DDT in the State of North Carolina, be it further

RESOLVED, that a copy of this resolution be forwarded to the North Carolina State Department of Agriculture, the Legislative Research Commission of the North Carolina General Assembly, Subcommittee on Pesticides.

SPEAKER OF THE HOUSE: This again is a substitute resolution, which has been made and properly seconded by the Reference Committee.

Is there any discussion?

[No response]

If not, those favoring acceptance of the substitute resolution, please say "aye"; opposed "no".

It is accepted.

DR. LARKIN: Resolution No. 6 introduced by the Executive Council.

Subject: Malnutrition.

This committee recommends adoption of this resolution.

SPEAKER OF THE HOUSE: Is there discussion of Resolution No. 6?

[No response]

If not, those favoring the adoption of it, please say "aye"; opposed "no".

It is adopted.

DR. LARKIN: Resolution No. 7 introduced by Cumberland County Medical Society.

Subject: Expansion of basic science departments in the three medical schools in the State of North Carolina in an attempt to ease the doctor shortage.

The committee recommends the approval of the following amended resolution:

Be it,

RESOLVED, that the Committee on Medical Education be requested in its discussions with the medical schools to explore the feasibility of expansion of the basic science departments and to consider further use of the community hospitals throughout the state for clinical teaching.

SPEAKER OF THE HOUSE: The substitute resolution has been properly made and seconded. Is there discussion?

[No response]

If not, those favoring acceptance of the substitute resolution, please say "aye"; opposed "no".

It is accepted.

DR. LARKIN: Resolution No. 8 introduced by the Executive Council.

Subject: North Carolina Association of Rescue Squads.

The committee recommends approval of this resolution with the notation that this is a reaffirmation of existing support and policy.

SPEAKER OF THE HOUSE: Is there discussion of Resolution No. 8?

[No response]

Those favoring acceptance please say "aye"; opposed "no".

It is accepted.

DR. LARKIN: Resolution No. 12 introduced by Meck-

lenburg County Medical Society.

Subject: Identification of Prescription Medications.

The committee recommends adoption of the following amended resolution:

Be it,

RESOLVED, that the Medical Society of the State of North Carolina go on record as supporting the labeling of all prescription medications as prescribed, unless the prescribing physician directs otherwise on each individual prescription. Be it, further

RESOLVED, that the North Carolina Pharmaceutical Association be informed of this action and be requested to implement this action.

SPEAKER OF THE HOUSE: The Chair will handle this also as a substitute motion. If you look at your yellow sheets at the original, you'll notice that they have changed the words "as prescribed" and substituted those in place of the words of "as to trade name, concentration and quantity".

Is there discussion of the substitution resolution?

[No response]

If not, those favoring acceptance please say "aye"; opposed "no".

It is accepted.

DR. LARKIN: We come now to the report of the Constitution and By-Laws.

1. This proposed change is concerned with giving Commissioners voting status on the Executive Council and it can be accomplished by the following:

Chapter IX, Executive Council, Section 1, line 3, page 24, delete "and" after "delegates" and add a comma after "Vice Councilors" and then insert the phrase, "and the Chairman of each commission provided for in the by-laws".

The sentence would then read as follows:

The President, President-elect, Vice-Presidents, Secretary, the immediate Past President, the Speaker and Vice Speaker of the House of Delegates, the ten Councilors (or Vice Councilors) and the Chairman of each Commission provided for in the by-laws which shall constitute the Executive Council, of which the President of this Society shall be President and the Secretary shall be Secretary.

The committee recommends approval of this section and wishes to point out that it is the privilege of the Executive Council to approve or disapprove the presidential appointees to the commissions as specified in Chapter X, Section 1 of the by-laws.

SPEAKER OF THE HOUSE: Dr. Larkin, this is a second reading and although you have the right to amend the proposed by-law change, I believe you have not.

This is identical to the original reading is it not?

DR. LARKIN: Right!

SPEAKER OF THE HOUSE: Is there discussion of this proposed by-law change?

Dr. Koonce!

DR. KOONCE: Mr. Speaker, this is Koonce of New Hanover County!

Mr. Speaker, I'd like to rise to oppose this very strenuously. For a small reason, it makes the Executive Council too large. It has fifteen now and if you

add eight more it would be a bit unwieldy, and that is at least part of the objection.

I am violently opposed to any officer of this Society not being elected by the House of Delegates. These commissioners are appointed by the President with a right to object by the Executive Council, but I don't think that's enough.

If you want to change the Constitution and state your Commissioners will be elected by the House of Delegates who are appointed by the President, I would go along with it, but I'm opposed to appointees being officers of this Society.

SPEAKER OF THE HOUSE: Is there further discussion?

Dr. Baker!

DR. BAKER: I rise to speak for the committee. I hope I speak for the committee. I see the Chairman over here. He's not a member of this body.

These people, in a way, are elected. Remember, they're only given a vote in the Council. They are not being given a vote in this body, this House of Delegates, and they are being elected in that the President recommends them to the Council and it's the Council itself who are our representatives to that floor, they do the electing by group, similar to appointments to the supreme court.

Remember these men come up, they're wise men and they just sit through these discussions and then they're powerless as far as vote goes.

This thing was considered very seriously in our committee and we thought our Council should be given power to elect these seven men for a vote, not in this body and I don't think this body limits the actions of the other body even though they do represent us. It might be wise to let them vote in the Council, but not on this floor.

SPEAKER OF THE HOUSE: Is there further discussion of this proposed by-law change? This is a second reading. It has laid on the table as required and only a majority vote of the delegates present will be necessary.

DR. KOONCE: Mr. Speaker, I would like to correct Dr. Baker's statement.

SPEAKER OF THE HOUSE: Yes, sir!

DR. KOONCE: If they are members of the Council, they do have a right to vote in this House of Delegates.

SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: Mr. Speaker, certainly my job as your President next year will be to solicit help and aid by appointing commissioners who aid in the work of the Society and I have sat for several years now on the Council and they are dedicated men who have worked with their committees, who have come to Council to report on the results and actions, etcetera, of their committees and have had no say so on that action as taken.

It is impossible for the Councilors themselves to know what goes on in each of these committees. They must depend on someone to do this. It is difficult to get a man to serve any length of time as a Commissioner when all he does is report and has no say so on the

final action.

I can see Dr. Koonce's point of view and I voiced this in the beginning when this was first brought up, but I feel that having Commissioners vote the Council will make them do their job better, so they can recommend to us the various committee action how they see the committee action from the point of view of the Council. They know what goes on in the whole Council and not only do they say to the Council, "This committee recommends this thing, but I, myself, knowing what's going on in the whole Council, and in the whole Society, recommend that you do or do not do what this committee suggests".

Therefore, they can be of great help in the Council and I think their efforts should be afforded the dignity of a vote.

Thank you.

DR. WAYNE J. BENTON: Mr. Speaker!

SPEAKER OF THE HOUSE: Yes, microphone number one!

DR. BENTON: I'd like to inquire if any Commissioner has ever asked for the privilege to vote in the Council?

SPEAKER OF THE HOUSE: Is anyone prepared and willing to answer that question?

DR. SHAFFNER: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: I do not know if they have ever asked to vote but I do know that some have been very active in trying to explain to the Council what they mean when someone says, "I don't have a motion, because I can't make a motion!"

SPEAKER OF THE HOUSE: Are you through, sir?

DR. BENTON: I'd like to make one more statement.

SPEAKER OF THE HOUSE: Yes, sir!

DR. BENTON: I think we do know as much about our own committees under our own Commissions, but I don't think we know as much about what's going on in the other commissions or any more than Ed. Beddingfield or any of the rest of the Council. Therefore, I would not object to that Commissioner having a vote on activities of his committees and to vote on that subject which he knows a whole lot about, but I think it would be bad to let me vote on something that's brought up that I don't know anything about.

SPEAKER OF THE HOUSE: Microphone number three!

DR. FRANK JONES: Thank you, Mr. Speaker.
Jones of Catawba!

I would like to call the attention of the House of Delegates to the following from the Constitution and By-Laws:

The House of Delegates shall be the legislative and business body of the Society and shall consist of (1) delegates elected by the component county societies and (2) ex officio the Past Presidents and Past Secretaries and the officers of the Society as defined in this Constitution.

The Constitution does not name these Commissioners as officers of the Society.

SPEAKER OF THE HOUSE: Just a minute, Dr.

Baker!

DR. FRANK JONES: I yield to the distinguished gentleman from Durham-Orange County! [Laughter]

SPEAKER OF THE HOUSE: Microphone number two!

DR. BAKER: These people would not become members of the House of Delegates because they are not named as officers of the Society.

SPEAKER OF THE HOUSE: Is there further discussion?

[No response]

If not, those favoring approval of this by-law change, please let it be known by saying "aye"; opposed "no".

May we please have a standing vote! Will the tellers be prepared.

Those favoring acceptance of this by-law change please rise.

[There followed a count of the standing votes.]

Would you please be seated and those who are against this by-law change please rise.

[There followed a count of the standing votes.]

Would you please be seated.

Dr. Jones, may we have the report of the tellers?

DR. FRANK JONES: Mr. Chairman, I give you the report of the tellers.

There were 48 against the motion; there were 42 for the motion, with some discrepancy between the tally of the tellers.

SPEAKER OF THE HOUSE: May we please have a recount!

Those who favor acceptance of this by-law change please rise!

[There followed a count of the standing votes.]

Would you please be seated.

Those opposed to accepting the by-law change please rise.

[There followed a count of the standing votes.]

Would you now please be seated.

DR. FRANK JONES: Mr. Speaker, somebody switched votes.

SPEAKER OF THE HOUSE: What's the final tally?

DR. FRANK JONES: The vote is for 43; against 47.

[Applause]

SPEAKER OF THE HOUSE: The motion fails.

Dr. Larkin!

DR. LARKIN: No. 3 concerns the flexibility of the Society in dealing with the dues of members who are severely disabled with greatly reduced incomes but who are not, in fact, totally disabled.

This can be accomplished by the following:

Chapter XII, Assessments and Expenditures, Section 1, page 45, the last sentence should read:

The Executive Council may exempt any member from the payment of partial or total dues and assessments who in its opinion should be relieved of such payment by reason of his personal circumstances.

We recommend approval of this section.

SPEAKER OF THE HOUSE: This is a suggested by-law change, a second reading. A simple majority could institute this by-law change.

Is there discussion?

[No response]

Those favoring the by-law change, please say "aye"; those opposed "no".

It is accepted.

DR. LARKIN: No. 4 consists of suggestions of ad hoc Committee on Tenure of Office.

The committee recommends adoption of this report and I'll read it by section.

A. Constitutional Secretary.

Article VIII, Officers, Section 2

The Constitutional Secretary shall be elected to not more than two consecutive terms . . . then continue with the rest of the section.

The committee recommends adoption of this section.

SPEAKER OF THE HOUSE: Thank you, sir.

We should take these up individually. All of number four are suggested Constitutional changes and when they are finally accepted on the second reading, a two-thirds majority will be necessary. However, at the first reading today to accept this requires only a simple majority and lacking that, the matter will fail of course and will obviously not come up for a second hearing.

Is there discussion of Item "A"?

DR. BENTON: May I inquire the second reading will be next year?

SPEAKER OF THE HOUSE: Yes, sir. It must lay on the table for one year. Thank you.

DR. BOGGS: How long is he elected now?

SPEAKER OF THE HOUSE: Three year term, with a total of six years.

Any further discussion?

[No response]

Those favoring acceptance of item 4-A please let it be known by saying "aye"; opposed "no".

[There were several dissenting votes.]

It is accepted.

DR. LARKIN: Speaker of the House of Delegates shall be elected to not more than three consecutive terms.

The committee recommends adoption of this section.

DR. BOGGS: How long is he elected?

SPEAKER OF THE HOUSE: One year.

Is there discussion of item 4-B?

DR. BAKER: I rise to speak to this from the committee again.

There has been quite a bit of discussion on this item in your Constitution Committee and wise heads have said there should be a limitation on your Speaker. Granted we should have the Speaker for three years and the Secretary for six.

I would be of the opinion and some people don't agree with me at all on this, that limiting the span to three years this may be long enough, but putting an absolute limit on it may be too short a time and I rise to suggest it be referred back to your Constitution and By-Laws Committee for further thought.

SPEAKER OF THE HOUSE: Are you moving referral of this matter, sir?

DR. BAKER: Yes, sir.

SPEAKER OF THE HOUSE: Is there a second?

[The motion was seconded from the floor.]

DR. BAKER: It only involves one year, so we don't have anything to do.

SPEAKER OF THE HOUSE: Is there any discussion?

[No response]

If not, those who favor referral of this matter back to the Committee on Constitution and By-Laws let it be known by saying "aye"; opposed "no".

[There were several dissenting votes.]

The matter is referred.

Dr. Larkin!

DR. LARKIN: Vice Speaker of the House of Delegates shall be elected to not more than three consecutive terms.

The committee recommends adoption of this section.

SPEAKER OF THE HOUSE: Is there discussion of item 4-C concerning the tenure of the Vice Speaker?

Dr. Shaffner!

DR. SHAFFNER: Mr. Speaker, I move this be referred back to the Committee on Constitution and By-Laws.

DR. BAKER: Second.

SPEAKER OF THE HOUSE: Is there discussion of this matter of referral.

Microphone number three!

DR. BLACKMON: Dr. Blackmon from Harnett.

Having served on the Nominating Committee, the effort in all these listings of time is to make life easier for the Nominating Committee. There are a number of able men in the 3300 membership in the State. It is not shooting at any one individual. It's just trying to get the thing moving along and getting all the physicians in the state involved in as much Society activity as they can.

DR. SHAFFNER: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: I am in sympathy with the Nominating Committee, but I am more in sympathy with the work of this House and if it seems advisable that a man be continued in a position, I think this is more important than the health and welfare of the Nominating Committee. Therefore, I speak for referral of this matter.

SPEAKER OF THE HOUSE: Thank you, sir.

If there's no further discussion of referral of this item to the Committee on Constitution and By-Laws we will take a vote.

All those who favor referral please say "aye"; opposed "no".

It is referred.

Dr. Larkin!

DR. LARKIN: Item 4-D North Carolina Board of Medical Examiners.

Members of the Board of Medical Examiners of the State of North Carolina shall be elected to not more than one six year term, provided, however, that a member who has served as Secretary for a full term of six years may be elected for an additional six year term.

The committee recommends adoption of this section.

SPEAKER OF THE HOUSE: Item 4-D as just read to you has been moved and seconded.

Microphone two!

DR. LYMBERIS: Mr. Speaker, if I may, I should like my remarks to apply not only to Section D, but to North Carolina State Board of Health, and the Editorial Board of the North Carolina Medical Journal—
SPEAKER OF THE HOUSE: 4-D, E and F!

DR. LYMBERIS: Yes.

Also, on the other page "G" Medical Care Commission and Board of Trustees of North Carolina Blue Cross and Blue Shield, Inc.

My remarks will apply to those organizations to which this body sends representation.

Now, the body of my discussion will not include "D" but the State Board of Health and the Editorial Board, Medical Care Commission and the Board of Trustees—

SPEAKER OF THE HOUSE: We're discussing "D" now only. If your remarks as you say are not referable to "D", let's hold them please.

DR. LYMBERIS: Excuse me, sir.

SPEAKER OF THE HOUSE: Is there any discussion of item 4-D?

DR. BAKER: I rise for clarification.

Maybe it's my stupidity that makes me read this, but it says a Secretary for a full term of six years may be elected for an additional six years. He may also be elected to six years which would make twelve. As to whether he's qualified is another matter. I think it should be stated how many re-elections he has.

SPEAKER OF THE HOUSE: Dr. Larkin, can you clarify the thoughts of the committee on this?

DR. LARKIN: Mr. Speaker, we did not notice the discrepancy. We thought it limited him automatically to two six year terms.

SPEAKER OF THE HOUSE: Microphone two!

PARLIAMENTARIAN HUGHES: Hughes of Durham!

I would like to amend item "D" by striking out the last sentence:

" . . . provided, however, that a member who has served as Secretary for a full term of six years may be elected for an additional six year term."

SPEAKER OF THE HOUSE: You would eliminate the last three lines except for the one word "term", is that right?

PARLIAMENTARIAN HUGHES: Yes, sir.

SPEAKER OF THE HOUSE: Is there a second to this suggested amendment?

[The motion was seconded from the floor.]

Discussion is now open on the amendment.

Is there discussion on the amendment which would eliminate the last three lines except for the word "term"?

[No response]

If not, please those favoring the amendment let it be known by saying "aye"; opposed "no".

The amendment is accepted.

We will now discuss the motion as amended.

[No response]

Hearing none, we will now vote!

Dr. Shaffner!

DR. SHAFFNER: My only concern here is that I would interpret this as a man would serve for six

years, be off for one year and never be eligible to serve again. I think we are limiting ourselves there.

I would move to amend the by-law change with this added onto the sentence and this wording can be changed:

. . . except that he may be re-elected after a lapse of two years. He may be eligible for re-election after a lapse of two years.

SPEAKER OF THE HOUSE: Dr. Shaffner has moved that the motion be amended to add the words after "term"—except that he may be re-elected after a lapse of two years.

Is there a second to this proposed amendment?

DR. WILKERSON: Second.

SPEAKER OF THE HOUSE: The floor is now open for discussion.

Dr. Beddingfield!

PRESIDENT BEDDINGFIELD: Mr. Speaker, I would suggest that what Dr. Shaffner is trying to accomplish, under the present mechanism of staggered terms on the Board, could be very simply accomplished by the addition of one word "consecutive", "one six year consecutive term."

SPEAKER OF THE HOUSE: Do you offer that as an amendment?

PRESIDENT BEDDINGFIELD: If he will substitute it for his.

SPEAKER OF THE HOUSE: Dr. Shaffner, if you are in agreement with his reasons, maybe you'd like to withdraw your amendment.

DR. SHAFFNER: I withdraw my amendment but I want to hear his again.

SPEAKER OF THE HOUSE: He substituted the words "one six year consecutive term". The word "consecutive" is added after six year and before term.

DR. SHAFFNER: Isn't he elected now for a six year term?

SPEAKER OF THE HOUSE: He is, right.

I'll rule him out of order! Your amendment is still on the floor, excuse me.

DR. SHAFFNER: He's elected now for a six year term.

SPEAKER OF THE HOUSE: That's the wrong word. He's out of order. Your amendment is on the floor for discussion.

Dr. Baker!

DR. BAKER: Maybe you're going to rule me out of order!

This is just an example of what comes to us and I don't see the Chairman here but he knows it very well. There is much apprehension among your membership about this limit of tenure so absolutely on all these representatives to outside organizations where other representatives are held without tenure and from what I heard yesterday, sitting in on the Reference Committee's meeting and what has come to me since then, I have no motion to make but I strongly request for consideration that you consider strongly referring all these tenure representations outside back to your Constitution and By-Laws Committee.

There's only one year involved anyway and I don't

think we should act rashly on these things. We may lose a lot of influence on outside boards.

I think if we can just put a loophole in it in some way, to keep an unusual man in a job outside, I think we can serve our Society better.

SPEAKER OF THE HOUSE: Dr. Shaffner!

DR. SHAFFNER: Mr. Speaker, may I request permission to withdraw my amendment?

SPEAKER OF THE HOUSE: Yes, sir.

If there's no objection, Dr. Shaffner, even though this amendment has been stated to you and if the seconder will agree—who seconded Dr. Shaffner's amendment?

DR. WILKERSON: I agree.

DR. SHAFFNER: May I move, Mr. Speaker, that this be referred back to the Committee on Constitution and By-Laws.

SPEAKER OF THE HOUSE: Is there a second to the motion to refer?

DR. WILLIAMS: Second.

DR. BLACKMON: Mr. Speaker!

SPEAKER OF THE HOUSE: Yes, sir.

DR. BLACKMON: I rise to point out to this group what we are doing and it doesn't matter to me what the outcome is, but last year, this body suggested that we have a committee to study tenure and this is basically what they have presented to us today. Now we're taking it away from that group and sending it and turning it over to the by-laws committee.

SPEAKER OF THE HOUSE: Thank you, sir.

The motion is before you to refer item 4-D back to the Committee on Constitution and By-Laws.

All those favoring this motion, please say "aye"; opposed "no".

The motion fails and so we are still considering the item unamended, except for Dr. Hughes' amendment which has a period after "term" but it does not have any other amendments.

Is there further discussion of this amended motion? Microphone two!

DR. T. TILGHMAN HERRING: Herring from Wilson!

I would like to mention that we had an election yesterday and we had a man on the Medical Examiners who had been elected to a national office and who, if he could only serve one term, would not have his tenure continued on our Medical Examiners while he was on the National Board of Medical Examiners.

As Dr. Shaffner mentioned, we would have a similar situation that we have now on various committees not to stay long enough to obtain the stature they deserve on these committees.

SPEAKER OF THE HOUSE: Hearing no other discussion, we will now vote on the amended motion which reads:

Members of the Board of Medical Examiners of the State of North Carolina shall be elected to not more than one six year term.

Those favoring this proposed constitutional change, please say "aye"; opposed "no".

We will have to have a rising vote.

Those favoring the constitutional change please rise!

[There followed a count of the standing votes.] Please be seated.

Dr. Jones, what is the report of your tellers?

DR. FRANK JONES: Mr. Speaker, your tellers report 48 in favor of the change, 36 against the change.

SPEAKER OF THE HOUSE: The motion carries and so the first reading of this proposed constitutional change is accepted. It will come back to you after a year on the table and then will require a two-thirds vote for acceptance.

Dr. Larkin!

DR. LARKIN: Item 4-E North Carolina State Board of Health.

The elected members of the North Carolina State Board of Health shall be elected by the House of Delegates to not more than two consecutive terms. The terms of the elected members of the State Board of Health shall be staggered such that two members shall be elected every two years.

The committee recommends adoption of this section.

SPEAKER OF THE HOUSE: Item 4-E is before you for discussion.

VICE SPEAKER OF THE HOUSE: Point of information!

How long is the term for?

SPEAKER OF THE HOUSE: A four year term.

Microphone number two!

DR. LYMBERIS: Mr. Speaker, when this organization sends representatives to other independent organizations, our members represent only a portion of these boards and the other members do not have tenure and this definitely weakens your representation.

On the State Board of Health, Medical Care Commission, the Board of Blue Cross-Blue Shield, our representatives form part of the governing body. The other representatives are not under tenure.

If this law was passed, it would be very difficult for our representatives to ever become members of the executive committees and those important policy making committees are where the real decisions are made.

I therefore submit you are weakening your own representation, and hence, organization.

In Sturgis's Standard Code of Parliamentary Procedure, it says and I quote:

Many organizations favor a short term of office, which brings officers up for review by election frequently. If the members are alert and interested, it is often unnecessary and disadvantageous to limit the number of terms to which a member may be elected because "one year is too long for a poor officer and too short for a good one".

It seems to me this matter of tenure is an attempt to take the difficult task of replacing a poor officer from the Nominating Committee. I believe the shoulders of the Nominating Committee are broad enough to assume this task and to execute it to the benefit of this body.

I can see no reason to deny the members of this House the privilege of re-electing a good officer to

a board or to any office if they think he is qualified.

SPEAKER OF THE HOUSE: Is there any further discussion of Item 4-E?

[No response]

If not, those who favor this constitutional change please say—

DR. BAKER: I'm sorry, but I'm getting up again, because so many people have come to us in the last day or so about this matter and by referring and not passing these things, we may be wiser heads.

I can't agree more with this thing of not limiting tenure. I think there's some way of having tenure but still have a loophole somewhere for this body to elect an unusual man to a job who's done a good job for a long time.

I speak against passing this resolution.

SPEAKER OF THE HOUSE: We will now vote.

Those favoring acceptance of this proposed constitutional change as outlined in 4-E please say "aye"; opposed "no".

The motion is defeated.

Dr. Larkin!

DR. LARKIN: Item 4-F Editorial Board of the North Carolina Medical Journal.

The elected members of the Editorial Board of the North Carolina Medical Journal shall be elected to not more than two consecutive terms.

The committee recommends adoption of this section.

SPEAKER OF THE HOUSE: Item 4-F is before you for discussion.

DR. ROSE PULLY: How long is the term now?

SPEAKER OF THE HOUSE: Four years.

A four year term now exists.

Hearing no further discussion, those favoring the acceptance of item 4-F please say "aye"; opposed "no".

The motion is defeated.

PRESIDENT BEDDINGFIELD: Mr. Speaker!

SPEAKER OF THE HOUSE: Dr. Beddingfield!

PRESIDENT BEDDINGFIELD: May I rise for a personal privilege, Mr. Speaker.

Briefly, I'd like to announce the presence in our House of Dr. William Perry, the immediate Past President of the South Carolina Medical Association, Chesterfield, South Carolina.

[Whereupon Dr. William Perry, immediate Past President of South Carolina Medical Association, stood up to be recognized.] [Applause]

SPEAKER OF THE HOUSE: Welcome, Dr. Perry! We're delighted to have you with us.

Dr. Larkin!

DR. LARKIN: Item 4-G Medical Care Commission and Board of Trustees of North Carolina Blue Cross and Blue Shield, Inc.

The elected members from the Medical Society of the State of North Carolina to the North Carolina Medical Care Commission shall be elected to not more than two consecutive four year terms.

The elected members from the Medical Society of the State of North Carolina to the Board of Trustees of North Carolina Blue Cross and Blue Shield, Inc., shall be elected to not more than two consecutive

four year terms.

Also, change final sentence of same paragraph to read as follows:

Members may be elected to succeed themselves except as otherwise specifically limited by the Constitution and By-Laws.

The committee recommends adoption of this proposal.

SPEAKER OF THE HOUSE: Yes, item 4-G a proposed by-law change is before you for discussion.

Dr. Baker!

DR. BAKER: I'm up for the committee again and I apologize. What we said about the other proposals holds the same for this only more so.

We had a discussion earlier in the day about Board of Health and Blue Shield, etcetera and I would strongly urge that you refer this back to your Constitution and By-Laws Committee, for I would urge you to continue the present tenure.

SPEAKER OF THE HOUSE: Any other discussion?

[No response]

If not, all those favoring acceptance of item 4-G please say "aye"; opposed "no".

It is defeated.

Dr. Larkin!

DR. LARKIN: Item 5 deals with proposed changes in Student Membership.

SPEAKER OF THE HOUSE: May I just say one word, please; in the interest of time I've asked Dr. Larkin under these proposed changes in Student Membership, to bring before us again only items 5-A which is a proposed constitutional change and then item 6 which is also a proposed constitutional change and not bring back to us 5-B.1, 5-B.2, 5-B.3 and 5-B.4 as these are all by-law changes contingent upon accepting the constitutional changes, 5 and 6.

So if these proposed constitutional changes are accepted by you today, these proposed by-law changes will be brought back to you next year with a second reading of the constitutional changes.

Dr. Larkin!

DR. LARKIN: Item 5 proposed changes in Student Membership.

This section was amended by your committee. The amendment is contained at the end of the paragraph and is underlined. The original stopped at "... membership in the Society" and we have added to that sentence which is underlined.

Any student who is regularly enrolled as a candidate for the degree of Doctor of Medicine in a school in the State of North Carolina, and who is an active member of his local Student American Medical Association Chapter, shall be eligible for Student Membership. This membership may be obtained through application to the Executive Office of the Society on a form provided for this purpose and election by majority vote of the Executive Council. Student members shall pay dues as periodically determined by the Executive Council, shall receive the North Carolina Medical Journal, and shall enjoy all the rights and privileges of membership in the Society, except for voting for

members of boards or commissions who are appointed or elected by this Society according to state law.

The committee recommends approval of this amended proposal.

SPEAKER OF THE HOUSE: Even though this is the second reading, changes such as the phrase that's underlined are permissible if they are germane to the sense of the proposed constitutional change and the Chair will rule that they are, so unless there is objection, you have before you consideration of this entire paragraph, which includes the phrase underlined.

Is there discussion?

[No response]

If not, those favoring acceptance of this proposed constitutional change please let it be known by saying "aye"; opposed "no".

It is accepted, on first reading.

Dr. Larkin!

DR. LARKIN: Item 6 House of Delegates to include Student Delegates.

The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) delegate elected by the component county societies and delegates elected by Student Members and (2) ex officio the Past President and Past Secretaries and the officers of the Society as defined in this Constitution.

The committee recommends adoption of this section.

SPEAKER OF THE HOUSE: Item 6 is before you. Is there discussion?

[No response]

If not, those favoring accepting, please let it be known by saying "aye"; opposed "no".

It is accepted, on first reading.

DR. LARKIN: Item 7 amend Chapter XV, Section 5, page 48 by deleting the last sentence which reads as follows:

No physician shall be admitted to this Society between a date following ten days after the Annual Meeting of the Society and the date of the next Annual Meeting of the Society except by special action of the Council.

The committee recommends adoption.

SPEAKER OF THE HOUSE: This is the second reading of a proposed by-law change so your acceptance today would make it effective

Is there discussion?

[No response]

If not, those in favor of this by-law change please say "aye"; opposed "no".

It is accepted.

Dr. Larkin!

DR. LARKIN: Item 8 amend Chapter IV, Section 18, page 17 on resolutions to read as follows:

No resolution shall be considered or voted upon by the House of Delegates unless the resolution has been filed with the Executive Director of the Society at least thirty days before the first meeting of the House of Delegates, except upon vote of two-thirds of the members present at the meeting of the House

of Delegates or upon reference to the House of Delegates by the Executive Council.

The committee recommends adoption of this section. The change is from fourteen to thirty.

SPEAKER OF THE HOUSE: This constitutes the only change, the requirement being fourteen days is now changed to thirty.

Is there discussion?

[No response]

If not, those favoring the change, please let it be known by saying "aye"; opposed "no"

It is accepted.

DR. LARKIN: Mr. Speaker, I'd like to thank Dr. Sherwood Barefoot and Dr. Charles Stuckey, the members who appeared before us and our very efficient secretarial help.

[Applause]

SPEAKER OF THE HOUSE: Dr. Larkin, we express our extreme appreciation to you and the other members of your committee, and the members of the staff who worked with you on a very difficult and well performed job.

May I have a motion that the entire report now be accepted.

DR. KOONCE: As amended!

SPEAKER OF THE HOUSE: As amended!

[The motion was severally made and seconded from the floor.]

Those in favor please say "aye"; opposed "no".

It is accepted.

We will now move to Reference Committee III. Dr. Koonce.

DR. KOONCE: Mr. Speaker, your Reference Committee III held hearing on Report 1 of the Board of Trustees of the American Medical Association which was the Report of the Committee on Planning and Development better known as the Himler Report and on Resolution No. 13 of the House of Delegates of the American Medical Association, which was the Minority Report of the American Medical Association Committee on Planning and Development, on Monday, May 18 from two p.m. until five p.m.

Some fifteen members of the Society were present throughout the entire hearing with five or six others being present at different times. We are appreciative of the rather thorough discussion which members offered at this hearing. In the following report, references are made to the Association which, as in the Himler Report, refers to the American Medical Association.

Mr. Speaker, may I make a couple of brief remarks?

SPEAKER OF THE HOUSE: Please do.

DR. KOONCE: Your Speaker, in his charge to the Reference Committees, stated that they had to bring back positive action on all business referred to them.

It was our judgment that this committee was a little bit different in that we did not have any business which belonged to this House of Delegates, which we were considering.

There were no specific resolutions, no specific reports that we had to consider and due to the fact that

any resolutions going to the AMA such as the Himler Report should have been in a week ago which wouldn't be too appropriate for us at the present time.

Therefore, this report of your Reference Committee III is more of a critique rather than bringing in any definite action. So, with your permission, I'll read the report.

Your committee found the Himler Report to be gratuitously hypercritical of American medicine and to reach certain conclusions some of which are already apparent to every physician. We can accept in part the recommendations of the Report without accepting much of the material in the preamble to these recommendations.

We are not willing to agree that the medical profession must be "prepared to accept some circumscriptions of the traditional privileges and freedoms of physicians."

Your committee is impressed with the contradiction in the Report between the early recommendation of "minimal regimentation, a multiplicity of practice options, and freedom of choice for both physicians and patients" and the continuing theme of central control and regimentation which appears throughout the entire Report.

Some concern was expressed by those present at the hearing concerning the World Health Organization definition of health which includes, "complete physical, mental and social well being" and the recommendation "that the AMA adopt an active role and take the initiative in developing all plans and programs for health care in all their ramifications."

Your committee feels that the physician is concerned with all factors which affect the physical and mental well being of his patient, but the general social well being of the patient should be the responsibility of the entire community rather than the medical profession.

Your committee feels that a Health Bill of Rights should be developed within these areas of medical responsibility.

The recommendation appears repeatedly in the Report that the Association gather data from the state and county societies on one or another aspect of health care. Your committee questions the value of such extensive data gathering. However, we feel that the standardization of data gathering on all local levels is most important.

We do feel that "the mere possession of information is not tantamount to wisdom" and that "the AMA must establish an internal mechanism for analyzing data, identifying problems and recommending policy". Your committee urges strong support of a policy of local solutions of local problems.

Your committee is in agreement that there are inadequacies and inequities in the present methods of furnishing health care and in medical manpower but feels that this is within the purview of the existing AMA's Council on Health Manpower.

The matter of doctors' assistants as referred to in the Report is currently under investigation and would appear to require no further specific action.

With regard to delivery systems for health care, your committee agrees with the Minority Report which states, "that other systems of practice are in some circumstances acceptable, appropriate, advisable, or even necessary, is undeniable, but private practice should not be disparaged nor its support abandoned". A physician should be allowed to engage in any form of voluntary medical practice.

Your committee is in accord with the statement that "fee policing or, indeed, any other supervision of physicians is best kept in the medical societies. Peer judgments are much more likely to be just and equitable in these matters than are decisions made by outside agencies".

Your committee concurs with the acceptance of the medical audit as evidence of ongoing education but is extremely skeptical of on-site office audits by non-medical personnel.

Your committee with a preponderant support of those members attending the hearing, rejects the concept of a National Academy of the Health Professions.

Mr. Speaker, this concludes the report of the Reference Committee III.

Your committee would like to thank the discussants and would like to particularly thank the secretary for her clerical assistance.

Signed: Donald B. Koonce, M.D., Chairman; Roy S. Bigham, M.D. and Patrick D. Kenan, M.D.

Thank you.

SPEAKER OF THE HOUSE: Thank you, sir.

This matter is now before you for discussion.

Dr. Beddingfield!

PRESIDENT BEDDINGFIELD: Mr. Speaker, I'd like to thank Dr. Koonce and his committee for a very excellent critique and while its true, as he said, it does not follow the Himler specific recommendations or motions, I would like to move that this be adopted as official policy attitude toward the Himler Report by the Medical Society of the State of North Carolina and that a copy of it be transmitted at the AMA convention in Chicago in June to the Reference Committee that will consider the Himler Report.

That would be the responsibility of the senior delegate.

[The motion was then severally seconded from the floor.]

SPEAKER OF THE HOUSE: The motion has been made and seconded that this report of Reference Committee III be accepted as a position paper for this Society and that a copy be sent to the Reference Committee of the American Medical Association, which will be considering this matter at its June meeting.

Is there discussion of the motion?

Dr. Welton!

DR. WELTON: Mr. Speaker, I would also like to express my appreciation to this committee for this fine statement.

As one of your delegates to the AMA House of Delegates, I would appreciate a positive expression of opinion on the matter of the World Health Organization definition of health.

I agree with the sentiments expressed in this report, but it does not tell me whether this House favors that or not.

SPEAKER OF THE HOUSE: Dr. Koonce, can you answer from your hearing yesterday what the feeling was about the definition?

DR. KOONCE: This House has taken no action on the WHO definition, so therefore it didn't come up as to whether they favored it or not.

We did not accept it. We had no right to. We were simply referring to it as it was in the Himler Report. This House of Delegates did not accept it to my knowledge.

DR. WELTON: This is the positive statement I desire, Mr. Speaker.

The Himler Report recommends that their definition be accepted.

If this definition is accepted by the AMA, there are possible complications. Among the major ones are, that the medical profession maybe considered as having the entire responsibility for the social welfare and all the other things referred to in that definition.

I think it's a possible concept and much of the Himler Report depends upon this definition and I would consider it a keystone if it is the Reference Committee's opinion that that definition is not acceptable, this is what I want to know.

SPEAKER OF THE HOUSE: Dr. Welton, I believe the motion before you is to accept this as published.

If you want to amend that motion, that is your prerogative.

DR. WELTON: Very well, my amendment would then be to request this House to express itself on this definition so that as their representative at the AMA meeting, I will be able to state what this is.

If the Reference Committee can so state, I'd appreciate that.

SPEAKER OF THE HOUSE: I think I'll have to rule you out of order, unless you want to make a positive statement concerning this motion that the House can then consider.

To ask them to express themselves, seems to me to leave them in limbo.

[No response]

If you'll amend it positively one way or the other, so the House can vote on it, I would think that would be in order, but I don't hear that.

Dr. Bigham!

DR. BIGHAM: Mr. Speaker, the definition of World Health Organization was considered specifically by the committee and is in the report which you have before you.

In discussion of the World Health Organization definition of health, which included, if I may reread this portion of the report:

Some concern was expressed by those present at the hearing concerning the World Health Organization definition of health which includes "complete physical, mental and social well being" and the recommendation "that the AMA adopt an active role and take the initiative in developing all plans and programs for health care in all their ramifications".

Your committee feels that the physician is concerned with all factors which affect the physical and mental well being of his patient but the general social well being of the patient should be the responsibility of the entire community rather than the medical profession.

As a member of the committee, it is my sense that the committee did not accept the definition of health outlined by the World Health Organization and we specifically state that "the social well being of the patient is the responsibility of the community, rather than the medical profession".

SPEAKER OF THE HOUSE: Sir, are you saying that the committee has reacted to this definition, which I think is what Dr. Welton wants?

DR. WELTON: I think that clarifies it, thank you.

SPEAKER OF THE HOUSE: Is there further discussion?

[No response]

If not, we will vote on the motion to accept this report as a position paper of this Society concerning the Himler Report and that a copy be sent to the Reference Committee of the American Medical Association for their use in June.

Those favoring the motion, please say "aye"; opposed "no".

[There was no dissenting vote.]

The motion is carried and this is a position paper of this Society.

I'll now recognize Dr. McCain as Chairman of the Committee on the President's Addresses.

DR. MCCAIN: The Committee on the President's Addresses has reviewed the remarks that have been made by the President and we find them most acceptable and most commendable and submit them for this House of Delegates.

SPEAKER OF THE HOUSE: Thank you, Dr. McCain.

This is his report. May I have a motion that it be accepted?

[The motion was made and seconded from the floor.]

Those in favor please say "aye"; opposed "no".

Thank you, very much, to you and to your committee, Dr. McCain.

I'll now recognize Dr. Beddingfield for one item of unfinished business.

PRESIDENT BEDDINGFIELD: Thank you, Mr. Speaker.

Before moving to that item, I have a very brief telegram that has the smell of salt air about it. It was directed to me and it says:

WE ARE GLAD THAT SELF-PITY IS NOT A FATAL DISEASE BEST WISHES FOR YOUR MEETINGS AND REGARDS TO ALL OUR FRIENDS IN THE SOCIETY AND THE HOUSE OF DELEGATES.

(Signed) Ben and Ann Royal.

The item of Unfinished Business was an oversight on my part when I gave the report of the Executive Council to you.

We have a communication from the Avery County Medical Society which is in due form recommending

for Honorary Membership Harold Adolph, M.D. a member of our Society who is presently serving as a medical missionary in Ethiopia, at a very minimal salary.

The Council investigated and considered this. The man is certified by his county society and it is the recommendation of the Executive Council that he be placed on a status of Honorary Membership for the duration of his missionary work.

Mr. Speaker, this requires a two-thirds vote of approval by the House.

Thank you.

SPEAKER OF THE HOUSE: You have heard the proposal from the Executive Council that Dr. Harold Adolph be elected to Honorary Membership for the duration of his missionary work.

Is there a second to this motion?

[The motion was seconded from the floor.]

Is there discussion?

[No response]

If not, those favoring this motion, please say "aye"; opposed "no".

It is carried by a two-thirds majority and he is elected to such membership.

The House is now open for New Business.

[No response]

If there is no New Business—

DR. BAKER: May I thank you for an excellent job!

SPEAKER OF THE HOUSE: I would like to express my appreciation to my very able Vice Speaker and my Parliamentarian, to thank all of you who labored so long and well with the Reference Committees and to thank our staff for the arrangements, and the untold staff work which they have done.

We stand adjourned.

[The meeting adjourned at five thirty o'clock.]

President's Dinner Meeting

TUESDAY EVENING SESSION

May 19, 1970

The President's Dinner of the 116th Annual Session of the Medical Society of the State of North Carolina convened at eight-twenty p.m. in the Main Dining Room of The Carolina Hotel, Pinehurst, North Carolina, Mr. H. C. Cranford, Jr., Director, Public Relations Division, North Carolina Blue Cross Blue Shield, Inc., Durham, North Carolina, Toastmaster for the evening.

Toastmaster Cranford: Ladies and Gentlemen.

I would like us to get started on this evening's program.

May I introduce myself; I'm H. C. Cranford, Jr., with North Carolina Blue Cross and Blue Shield and I hope all of you are and still will be after the evening is over!

Back in 1967 B. C.—Before Consolidation—I used to say my initials stood for Hospital Care. Now since the merger of Hospital Care and Hospital Savings and the assorted woes of Medicaid and Medicare have been descended upon us, and now the threat of national health insurance looms on the Blue Cross horizon, I just say that H. C. stands for Hope and Courage! [Laughter]

We've got so many worries in our world right now that if any new ones come along, it's going to be at least two weeks before we can get to them!

We're running that far behind!

So, it is indeed a pleasure for me and my wife, Lois, to be here with you good friends in the Medical Society tonight to join in this gala President's Ball and Dinner, honoring your distinguished leader, Ed. Beddingfield.

We thank you for the invitation.

I've been working with, for and around doctors for so long I feel just like one of you and whichever one it is ought to be home in bed, I'll tell you that! [Laughter]

Really, it is a great honor for me to be invited here tonight to serve as your Task—[laughter]—whoops! Taskmaster! [Applause] Maybe that's a Freudian slip! Maybe that's better than Toastmaster, but anyway I haven't been so flattered since my mother gave me a size 32 belt and a hairbrush for Christmas! I really do appreciate it!

I don't know what I'm supposed to do and say tonight. I didn't get much help from Bill Hilliard and Ed. Beddingfield when I said, "Well, what am I supposed to do? How about giving me some guidelines?"

They said, "You're on your own!" and Bill said, "That's right, you are!" [Laughter]

So I hope whatever I do tonight will be close enough to what Ed. had in mind when he invited me down here.

(At this point the Toastmaster related several

amusing stories.)

But I have digressed here and I'd better get on with my responsibilities.

It is my very great pleasure and privilege now to introduce to you at this time some of your distinguished colleagues and their ladies who are seated at our head table tonight.

If you will kindly refrain from applauding until all have been introduced, I'll see if I can follow the rule here.

[At this point the Toastmaster introduced those seated at the head table and distinguished guests in the audience.]

And, right down front here, several people have asked who these several young people are and I inquired and they turned out to be the son and daughters of our distinguished President, so I asked the privilege of introducing them.

The son of Dr. and Mrs. Beddingfield, Ed. Beddingfield, III. Ed. would you please stand up.

[Whereupon Mr. Edgar Beddingfield, III. stood up to be recognized.] [Applause]

And, their daughters, Alice and Gladys!

[Whereupon Misses Alice and Gladys Beddingfield stood up to be recognized.] [Applause]

Ed. and Alice are students at the University of North Carolina at Chapel Hill and Gladys lives in Stantonsburg with her parents and next year will be a high school freshman.

Congratulations, Gladys! [Laughter]

She can hardly wait.

Well, I believe that takes care of all the introductions now, if I can find my place here.

We're running a little late, so I'm going to have to leave out some of these little gems! [Laughter]

I believe we will come now to the main order of business of the evening, the presentation of the President's Jewel and the installation of your new President.

I call now on a Past President of this Society, a distinguished physician who is known, respected and loved throughout this State and nation to make this presentation, Dr. George W. Paschal, Jr.

Dr. Paschal! [Applause]

Dr. George W. Passchal, Jr.: Mr. Toastmaster, President Beddingfield, Distinguished Ladies and Guests, Members of the Medical Society of the State of North Carolina:

Edgar Theodore—it took me a long time to find out that's his name—Edgar Theodore Beddingfield was born in Clayton, North Carolina, on March 5th, 1923.

After the usual early life of scholastic endeavors, he entered the University of North Carolina at Chapel Hill.

Since his father was a pharmacist, it was natural that his interest was directed toward that profession. In his last year of pharmacy, he changed course and entered the University of North Carolina two year medical school.

He transferred to Harvard where he received his medical degree with honors in 1948.

Upon conclusion of his military obligation as a captain in the Medical Corps United States Army in 1950, he began the practice of medicine in Stantonsburg and has been effectively involved in organized medicine since; having been president of the Wilson County Medical Society, the Fourth District Medical Society; Councilor of the Fourth District; for nine years; First Vice President of the Medical Society of the State of North Carolina; member of the North Carolina Academy of General Practice; the Boston Society in Boston; the Aesculapian Club of Boston; Committee memberships in state and American Medical Association and President-elect of the Medical Society of the State of North Carolina.

He was exceptionally and roundly prepared for the duties he has discharged with such distinction since he became our President.

I think his most significant service has been in the area of legislative affairs. Never before, have we had a chairman of our legislative committee who was as knowledgeable and as assiduous as he.

Proof of this is that he is now a member of the American Medical Association's Council on Legislation. We should encourage him to run for Congress!

[Laughter] [Applause]

He has been the deserving recipient of numerous awards such as the John Harvard Fellowship in 1950 and the Distinguished Alumni Award from the University of North Carolina in 1968.

His talents have been used on the advisory councils of our state and recognition of his competence is widespread among his peers.

While attending what was then East Carolina Teachers' College one summer session to get off the final requirement for entrance into medical school, he met Lorraine Moore and, in fact, he hasn't been the same since! [Laughter]

They, of course, eventually married. The two of them took a Sunday afternoon drive over to Stantonsburg where she had taught school. They both liked the town and since the only doctor there had recently left because of overwork, Ed decided that was where he would like to practice.

In spite of being overworked, Ed remained there for eighteen years. He was then persuaded to join the forces of the prestigious Wilson Clinic.

Now, as you have heard he and Lorraine have three children: Edgar T. the third, a sophomore at the University of North Carolina, Chapel Hill; Alice, a freshman at the same institution; and, Gladys in junior high at home.

Now, recently Lorraine ordered Ed a tweed hat in which he had expressed some interest. When it came, its maker sent a little enclosure which attested to its being well made and quite durable. It advised him that in making his will, he should consider this item carefully because anybody could marry his widow, but not just anybody could wear that hat! [Laughter] Which would certainly last longer than he!

Ed enjoys playing and singing. He enjoys church and civic activities. We assume he enjoys the responsibilities that go with leadership in organized medicine.

It is in recognition of his significant contribution to our Medical Society that I have the distinct privilege and honor of presenting to him the President's Jewel.

May he wear it with pride and with the full knowledge that in it is a token of the appreciation, affection and admiration in which he is held by the members of the Medical Society of the State of North Carolina.

Ed, please come forward!

[Whereupon Past President Paschal then presented the President's Jewel to President Beddingfield.] [Applause]

PRESIDENT BEDDINGFIELD: Thank you, very much.

Thank you all so very, very much.

Thank you, George. I'm going to save that for my obituary one of these days! [Laughter]

Before I make my last official act as your President and administer the oath of office to my successor, there are one or two things I did want to say.

We have many remarkable people in the audience tonight and I should like to pay a lot of tribute and introduce a lot of people, but I don't want to miss what East Carolina University has got waiting for us in the form of entertainment.

I do, however, want to take just a moment to tell you about one person who's here.

The wife of Dr. Ernest Furguson of Plymouth is here tonight and it is the first time that she has been to a State Medical Society meeting to which she used to come very regularly since 1955.

Her name is Clara Louise and is affectionately known as "Queezie".

But Queezie became sick and became somewhat of a semi-invalid with Parkinson's Disease in 1955 and has been essentially bedridden with a great deal of spasticity and rigidity.

Because of the new advances in treating this disease, Dr. Furguson arranged to have her treated with some neurosurgery in New York City, extremely successfully.

I heard about this and I found a little paragraph that Ernest wrote in a hotel in New York City in the lobby after he heard the operation was successful.

I'm awfully glad to share with you just this little short paragraph that Dr. Ferguson wrote about her.

He said this, dated March 26, 1969:

After twelve years of total incapacity, my wife was admitted to the 102 year old St. Barnabus Hospital in New York, founded by an episcopal minister, the Reverend Washington Rodman, it was known as the "home for incurables". Indeed, the wards and halls today are filled with those who have little hope of recovery from their mental and physical infirmities and yet the kindly and friendly and cheerful atmosphere which pervades every nook of this sacred place is astounding to behold and so as a stranger from the southland, my 52 year old wife entered this quiet and cordial sanctuary. The fol-

lowing morning, March 25th, an operation was performed through a dime sized opening in her skull. Without premedication and without anesthesia, the tip of a cranial surgical cannula was guided through the brain with meticulous accuracy under x-ray control. A very small vein of brain tissue around the cannula tip was next cooled temporarily as a check on the correct localization. Then the temperature was gradually lowered by the use of liquid nitrogen to 97 degrees centigrade. As the freezing process upon this area the size of a small marble occurred, the tremor and rigidity disappeared. On that same afternoon and for the first time in over a decade, I observed my wife fully conscious, resting quietly in bed with no evidence of tremor or rigidity. Today, the day after surgery, she stood alone and her walk was straight. Her voice and her smile were soft and lovely and her faith in the living God remains unshaken. Unknown is the final chapter in this miracle but we believe that many prayers have been answered.

(signed) Ernest Furguson.

Well, she has stayed better. She's here with us tonight and, Queezie, I just wish that you and your husband and your lovely daughter who is with you would stand up and let us recognize you.

[Whereupon Dr., Mrs. and Miss Furguson stood up to be recognized.] [Applause]

Before I call Dr. Shaffner here to administer the oath to him, I want to share one other very short thing with you.

I received a letter in the mail today delivered to me while I was in the House of Delegates and this letter is from an ex-patient of mine who's now in the Western part of the State. I'd like to share it with you. He says:

Dear Ed:

I saw in yesterday's paper that Dr. Shaffner will be the new President of the Medical Society. My encounter with him was very brief. He and Dr. Young helped me with a staph. infection when I was in Baptist. While I know very little about his medical ability, I've heard he can perform miracles and I believe he may well be able to do that. I do know he is a kind, gentle man. You are passing your duties into strong hands and I know that you'll enjoy working with him.

Give my regards to Lorraine. Keep an eye on the folks at home for me.

Sincerely, N. Barnum Marshall, who now lives in Madison, North Carolina.

Apparently, this is a patient that both Louis and

I have treated which shows you what a really small state we have and I thought this was a nice tribute to Louis Shaffner and I wanted him to hear it

Louis, if you'll come forward, I'll give you a job! [Laughter]

I will administer the oath of office and I will ask Dr. Shaffner to repeat after me. Will you raise your hand, please, Dr. Shaffner?

[Whereupon, as President Beddingfield administered the oath of office, Dr. Shaffner recited after him.]

[Whereupon Past President Beddingfield then presented the gavel to President Shaffner and the entire assemblage then accorded newly installed President Shaffner a standing ovation.]

PRESIDENT SHAFFNER: Mr. Toastmaster: Dr. Beddingfield, Distinguished Guests, Ladies and Gentlemen:

I have had to accept the fact that I cannot be another Dr. Beddingfield, nor shall I presume to be and it is not necessary that I add that I know neither he nor you expect nor want me to be and I'm glad for that because I don't like cigars! [Laughter]

But, I would be remiss if I did not make it my first official act, as your President, to express not only my own personal thanks on behalf of the Medical Society, for you, to Dr. Beddingfield for his devoted and magnificent service to this Society during the past year. Let's all give him a round of applause.

[Applause]

And, my second official act is to appoint him Chairman of the Committee on Legislation. [Laughter] Will you accept this assignment?

DR. BEDDINGFIELD: Yes, sir.

PRESIDENT SHAFFNER: Mr. Hilliard, he has accepted. Will you make note of that quickly? [Laughter]

[President Shaffner then presented his address of acceptance to be published in the North Carolina Medical Journal.]

[Whereupon, at the conclusion of his address, the entire assemblage then accorded President Shaffner a standing ovation.]

TOASTMASTER: Dr. Shaffner, Dr. Beddingfield, as a member of the laity, may I say thank you and congratulations to both of you; to Dr. Beddingfield for not only the fine job he has done for the medical profession for the State of North Carolina, but for the people of this great State during the past year; and, to Dr. Shaffner for the fine job that I'm sure he will do for both in the coming year.

The Medical Society of the State of North Carolina has been and is in very competent hands.

If there is no further business, we stand adjourned.

[Applause]

[The meeting adjourned at nine o'clock.]

General Sessions

MONDAY MORNING SESSION

May 18, 1970

The First General Session of the 116th Annual Session of The Medical Society of the State of North Carolina convened at eleven-ten o'clock in the Cardinal Ballroom of The Carolina Hotel, Pinehurst, North Carolina. Dr. Edgar T. Beddingfield, Jr., President of the Society, presiding.

PRESIDENT BEDDINGFIELD: Gentlemen, I call this First General Session into order. I ask you to take your seats as rapidly as possible.

We have an interesting program. It's ready to go and a time problem.

If you will be seated, I'll call upon the Reverend James Dellert, Sr., Minister of the Brownson Memorial Presbyterian church, Fayetteville, for the invocation.

REVEREND JAMES R. DELLERT, Sr. [Minister, Brownson Memorial Presbyterian Church, Fayetteville, North Carolina]:

[Reverend Dellert then gave the invocation]

PRESIDENT BEDDINGFIELD: The members of the panel have asked that I not spend much of the valuable time in introducing them at length. They're all known very well here in North Carolina.

Moderating our panel is Dr. Eugene D. Stead, Jr., from Duke University Medical Center. His fellow panelists are Dr. Jay Arena also from the Duke Medical Center and Dr. Cecil Sheps of the Health Services Research Center at Chapel Hill.

[Comments by each of the three panelists will be submitted to the North Carolina Medical Journal for possible publication]

PRESIDENT BEDDINGFIELD: I'd like to thank Dr. Stead, Dr. Arena, Dr. Sheps, the panelists. This has been an exciting meeting.

I'd like to thank the audience. This has been one of the better attendances at a general session. I hope you'll come back on Tuesday and Wednesday mornings at the other general sessions.

My only regret about this morning is that time has run out, Dr. Stead, because we wanted more chances to direct questions.

Time has run out on us.

We will at this moment adjourn this general session. Thank you, very much.

[The meeting adjourned at twelve-thirty o'clock.]

TUESDAY MORNING SESSION

May 19, 1970

The Second General Session of the 116th Annual Session of the Medical Society of the State of North Carolina convened at eleven-ten o'clock. Dr. Robert P. Crouch, First Vice President of the Society, presiding.

CHAIRMAN CROUCH: In order that we might not rob our panelists of their time and that we might give them an opportunity to express themselves, I'd like to get started.

This, then, is the Second General Session of the Medical Society and we have for our discussion today a panel that is of quite some interest to most of us.

Many of us have enjoyed gazing into a crystal ball just a little bit and trying to predict what the practice of medicine will be like in the future. Many articles have been written. A great deal has been said in the press and in national magazines and in current medical literature.

I remember our dean at medical school a few years ago had an article about the future of medical practice.

It changes from year to year in constant change.

You'll notice a varied panel. This is a panel with a great deal of experience. I will not introduce the panel members. We'll save that for our discussion leader.

The discussion shall be "The Future of Medicine and Medical Education".

Moderating the panel will be our newly elected Secretary of the Medical Society of the State of North Carolina, Dr. Harvey Estes from Duke.

DR. E. HARVEY ESTES, JR. (Moderator): Now, some of our panel needs no introduction and I will engage in no introductory speeches.

Dr. John Kernodle here needs an introduction to any man in this room. He represents us well. He has represented us for years and continues to do so in the State Society and in the AMA national organization.

Bill Herring on my right heads the UNC teaching program at Cone Memorial Hospital in Greensboro, so he wears the hat of both an educator and a man who is familiar with the community hospital.

Reed Underhill, on my right, is a medical student. He is President of the student body at UNC and he's a person who has thought long and hard about these problems.

So, it's an expert panel and I won't take any more of their time.

[Comments by each of the panelists will be submitted to the North Carolina Medical Journal for possible publication]

CHAIRMAN CROUCH: Let me take this opportunity to thank Harvey Estes and his panel.

If they did not raise some questions and thoughts in your minds, then you stayed out too late last night, or you were simply not listening to what was going on!

Now, take a minute, if you would, to stretch. This will give the panel an opportunity to leave the podium and the President to come up before we hear from the President.

[There followed a five minute recess.]

We will now reconvene, if you will take your seats.

May I then declare the Second General Session of the Medical Society of the State of North Carolina back in session.

It is a privilege once or twice a year to hear special words from our President.

I will not take the time nor defame him in any way by making a long introduction.

Ladies and Gentlemen: May I present the President

of the Medical Society of the State of North Carolina, Dr. Edgar T. Beddingfield, Jr.!

[Whereupon the entire assemblage then accorded President Beddingfield a standing ovation.]

[President Edgar T. Beddingfield, Jr., then presented his annual address, to be published in the North Carolina Medical Journal.]

[At the conclusion of his address President Beddingfield was accorded a standing ovation.]

CHAIRMAN CROUCH: Thank you, President Ed.

I think I can say without question that you have given us much food for thought.

May I remind the audience that the President's Address will be published in the North Carolina Medical Journal. I hope you'll all digest it and respond to it in one way or another.

After all if a speech goes unheard, unstudied and unresponded to, it has not done the job for which it was intended.

We're grateful to you, Ed, for your speech, for your comments and most particularly, of course, for your leadership for the past year.

The session is adjourned.

[The meeting adjourned at one p.m.]

WEDNESDAY MORNING SESSION

May 20, 1970

The Third General Session of the 116th Annual Session of the Medical Society of the State of North Carolina convened at nine-five o'clock, Dr. Rose Pully, Second Vice President of the Society, presiding.

CHAIRMAN PULLY: At this time, I would like to call into session the Third General Session of the 116th Annual Meeting of the Medical Society of the State of North Carolina.

We will turn the program over to the Conjoint Session of North Carolina State Board of Health and Medical Society of the State of North Carolina with Dr. James Raper and Dr. Jacob Koomen reporting.

Dr. Raper!

DR. JAMES S. RAPER [President, North Carolina State Board of Health]: Thank you, Dr. Pully.

The State Board of Health was conceived almost one hundred years ago, 1877. It was conceived by the Medical Society of the State of North Carolina. They finally, after several years, prevailed on the State Legislature to make \$200 available for public health work in North Carolina.

After several years, it was increased to \$400.

Physicians did work for the State Board of Health. It was necessary for them in their zeal for the work that they were doing to contribute money from their own pocket to carry out the work.

Finally, in 1909, a director was made possible by funds from the Legislature and since 1909 North Carolina has been privileged to have a Director of the State Board of Health.

We have just discussed briefly a "B" budget item for the State Board of Health of North Carolina for the next biennium and this amounts to over \$5 million. This is in addition to the essential work, absolute essen-

tial work of the Board which amounts to well over \$21 million.

This is how much you, in North Carolina, are spending and I hope are receiving in good measure from State Board of Health.

It's my pleasure at this time to introduce to you to speak for the State Board of Health, Dr. Jacob Koomen!

Dr. Koomen!

DR. JACOB KOOMEN (State Health Director):

Dr. Edward G. McGavran, Dean Emeritus of the School of Public Health of the University of North Carolina, has defined public health as the diagnosis and treatment of the body politic; that is, the community. It is in the spirit of this definition that this presentation is made. We will attempt to describe some of the major problems of the health of the public and what we might do to treat these problems, rather than to describe in narrow focus the specific program activities of the State Board of Health. The reason for this is that the responsibility for health promotion, disease prevention, treatment and rehabilitation is widely shared. Although some health responsibilities are the clear-cut legislated duty of the State Board of Health, the wider scope of identification and solution of the health problems of people and their environment cuts across the boundaries of many agencies and organizations, both public, private, and voluntary. Thus, while our report to you will emphasize the activities of the State Board of Health, since that is the charge in our presentation, this wider perspective must be borne in mind. Furthermore, when we speak of public health activities, we will include the work not only of our agency, but also the local health departments. These local health departments are partners with us in the provision of public health services and, indeed, represent the front line for most of our activities.

The following activities are presented as being major efforts necessary in the protection and preservation of the health of people of North Carolina. They are not presented in rank order of importance, but represent a selection, out of the varied and extensive health programs, of some of the more necessary activities.

Early detection and early treatment for chronic disease is not sufficiently available to the adult population of the state in terms of availability and promotion. Adult health services for chronic disease detection through such mechanisms as multiphasic screening is of considerable importance. Indeed a coordinated, preventive program for the entire population should be considered. Economic implications of the early diagnosis of chronic illness relative to effective treatment and prevention of long-term disability is clear, to say nothing of the social and personal potential. A strong new effort must be undertaken to develop multiphasic screening clinics which would be more readily accessible to the entire population and to promote and extend the use of this newer concept in adult health services. These statements are particularly pertinent when one considers that 75% of medically indigent women are still in need of cancer

screening and indeed, at least the same is true in cancer screening of the total female population of the state. Approximately 95% of the indigent population does not receive early detection and screening services for other chronic conditions. The goal must be to provide adequate adult health screening, including the newer multiphasic techniques for the chronic diseases to the eligible population by a coordinated, comprehensive, preventive services system.

Public demand for home health services, in part due to payment for such services by Medicare-Medicaid and private insurance carriers, necessitates development of services in the seventy-one counties lacking their own services. The goal of the agency is to provide approximately 77,000 additional home visits by the end of 1972.

Considerable attention must be given by the state to the construction and renovation of in-patient care facilities such as hospitals, nursing homes, extended care facilities, and related resources.

In the area of family planning, eighty per cent of an estimated 260,000 indigent or medically indigent, potentially child-bearing women have not been reached by present services. Furthermore, less than one per cent of males receive medically-oriented birth control services. The ultimate goal must be to provide family planning and birth control services to all men and women wanting and needing the services and to promote acceptance. The end result of such effort will be the significant reduction in unwanted births. In order to do this there must be developed a comprehensive program of medical, social, and educational services. The present program must be expanded to include out-reach people to contact the public and encourage them to seek consultation. There must be a greatly expanded clinic system which would include innovations in the delivery of contraceptive services.

In the field of child health, sixty-two per cent of 361,644 medically indigent infants have yet to receive nurse screening and pediatric clinic services to prevent illness and to maintain a healthy child population. Further, the present developmental evaluation clinics do not meet the present demand for services to children with potential and existing developmental problems. The goal should be to provide intensive, evaluation services for all children in need of such services and to provide training to increase the skills of those dealing with developmentally handicapped children. Child health screening and evaluation services must be coupled with early treatment and follow-up care. Existing programs must be expanded and must coordinate both public and private resources so that the entire child population can be assured of needed diagnostic, treatment, and preventive services.

As a corollary, thirty per cent of the medically-indigent handicapped children covered by the Crippled Children's program are not receiving necessary early quality care. The goal must be to enhance case-finding mechanisms to locate and serve all children eligible at an early stage of their condition when treatment facilitates optimum rehabilitation.

In spite of increased efforts and increased concern

over the problems of drug abuse, the problem continues to grow. There must be increased awareness of the situation, awareness that is perceptive and enlightened, as well as determined. The problem must be handled in ways that are humane and understanding, leading to restoration and recovery, rather than in ways that are repressive and harsh, leading to further dissociation and despair.

In the area of accident prevention, major efforts must be continued and expanded in a multi-organizational cooperative venture to reduce the number of drunken drivers. Experience indicates that we must remove the drunken driver from our highways if we are to make a significant impact on the slaughter that takes place there. Efforts must also continue to deal with the problem of the medically incapacitated driver. In addition, continued emphasis must be given to the improvement of emergency medical services, including ambulances and hospital emergency rooms.

Protection of workers in North Carolina, particularly those in our growing industries, must receive our concern. Continued and expanding efforts must be made to gain new knowledge of the relationship between the employee's health and his working environment and the materials of industry which he handles. Improved surveillance and investigative techniques must be employed. With the cooperation of industry, health hazards in the working environment must be removed by appropriate engineering and other methods. Related to this is the on-going work to learn more about the effect of exposure to pesticides including epidemiological and toxicological studies and the adoption of measures to protect the public from the ill effects of these chemicals.

In addition to maintaining programs to protect North Carolinians from communicable diseases, including tuberculosis and venereal diseases, a special effort in measles and German measles control will be made. These common childhood diseases are not innocuous, but can have unfortunate effects. Measles may affect the nervous system and even cause death. The effect of German measles on the developing embryo and the resultant causation of serious birth defects is well-known. Vaccines are available for both of these diseases and intensive efforts can result in their being brought under control.

Dental Public Health continues to emphasize fluoridation, with attention to small community and school water supplies. The State Board of Health plans to test such innovative programs as the mass self-application of fluorides performed by classrooms of children under the supervision of staff dentists as well as other community research programs.

It is possible to provide restorative services to only a fraction of the eligible population in North Carolina. Auxiliary personnel must be employed to effectively broaden the scope of public dental services. These auxiliary dental personnel, in the form of dental hygienists, can be a useful adjunct to the professional staff in order to lower the cost of providing direct services to school children and to make services available to more children. Hygienists will be able to con-

duct the educational and preventive phases of a dental program which now consume about half the dentist's time; the dentist will then be able to double the amount of the more costly restorative services which he presently performs.

In the field of environmental health special efforts must be undertaken to control the growing problem of solid wastes. Under authority of an act of the 1969 General Assembly, the State Board of Health is moving rapidly to develop a State Plan and to prepare standards for disposal facilities. Technical assistance will continue to be provided to local government units in planning and establishing approved facilities that often require the close cooperation of municipal and county government. These local governments must make special exertions of their own to provide needed services to their constituencies.

The trend toward multiplication of small public water systems needs to be reversed by incorporation of these systems into an effective county-wide or regional system. Program activities need to be realigned and strengthened to place additional emphasis and promotion of these county-wide and regional systems, as well as finding increased support and direct assistance for communities experiencing water problems.

With the establishment of large nuclear facilities in the State specific surveillance programs must be designed for each facility to insure that the environment is adequately protected in accordance with present regulations and other accepted standards. We must persevere in our efforts to protect the public from radiation hazards, from the growing number of industrial and other sources.

Housing will continue to be a difficult and sensitive issue. Public health programs have attacked these conditions separately from the total housing environment, but health programs are not enough to adequately solve our housing dilemma. Development of an action program to provide an organized, coordinated effort by state and local environmental health personnel to improve these conditions is under consideration and an even more widely encompassing attempt at the state as well as the local level must be made to protect the quality of housing in North Carolina.

In the area of milk production, there is increasing difficulty for county units in providing adequate supervision of the industry because of its increasingly regionalized nature. Because it is exceedingly difficult for a local unit to adequately oversee the sanitation of raw milk production, it is planned for the state to supplement on a regional basis the farm inspection work of local health departments in order to insure continuing adequate supervision of milk production.

In the field of health information processing, important new developments are predicted. A state center for health statistics would be extremely useful where health data can be collected, processed, analyzed, and disseminated. Electronic data processing would be an integral part of such an undertaking. A facet of this is illustrated by the establishment of a projected cancer registry which will provide an educational vehicle

aiding in the care and treatment of cancer patients, as well as assistance in the dissemination of data for research purposes regarding the treatment and control of cancer. Within the State Board of Health newer planning and organizational approaches will be explored such as systems concepts and program budgeting techniques in order to more effectively plan for public health services.

We at the State Board of Health have a major responsibility to support our colleagues in the local health departments. We seek to assure competent administrative leadership for all local health agencies. We seek to provide the necessary assistance and skill by multi-disciplinary consultation in comprehensive program planning for our local health departments and other community agencies. We expect to intensify our efforts in orienting unprepared public health professionals to their new careers as well as providing them with continuing educational opportunities. We seek to assist North Carolina communities in developing plans for meeting emergency health needs resulting from hurricane, tornadoes, flood, or any other serious disaster.

A new undertaking by the State Board of Health would be to try to assist areas where local Boards of Health have not been able to recruit competent local health directors in spite of coming together into multi-county district arrangements. In such arrangements the State Board of Health would assign public health physicians to those departments as local health directors, possibly without cost to the local governing body. This would, of course, be a limited program at its inception, but has considerable potential for enhancing competent local administration.

Work will be sustained in improving the planning practices of local health departments by the promotion of effective planning techniques and education of local staff in using these techniques. Promotion of this matter, including the use of the newer planning and management techniques, can result in the improvement of the delivery of public health services. Impetus to planning will be given by consultants in the regional offices, giving increasing importance to the field staff of this agency.

Among these field staff need to be experienced personnel whose role will be to forge local medical society, hospital staff, and other community agencies and organizations into well coordinated teams for the purpose of preparing and periodically testing the health components of community disaster plans.

Finally, the pathological and toxicological services of the Medical Examiner System are in growing demand. This resource must grow with the demand, in order to continue to aid the state in the discharge of its medicolegal responsibilities to its citizens.

An attempt has been made to present what we feel are some of the more important contemporary health needs and some of the measures that ought to be undertaken to meet these needs. They are relevant to the preservation or restoration of physical, mental, and social well-being of the people of North Carolina. In focusing on health, we must be conscious of the prob-

lems of the individual, the family, and the community, and be aware of both personal health and environmental health factors.

In conclusion, let me share with you two quotations. One is by G. H. T. Kimball, from a report to the Twentieth Century Fund. "It is bad enough that a man should be ignorant, for this cuts him off from the commerce of other men's minds. It is perhaps worse that a man should be poor, for this condemns him to a life of stint and scheming and there is no time for dreams and no respite for weariness. But what surely is worse is that a man should be unwell, for this prevents his doing anything much about either his poverty or his ignorance." The second quotation is from our own Dr. George W. Paschal, Jr., a Raleigh surgeon and past president of the North Carolina State Medical Society. "The solution of the complex problem of providing health services will require a co-ordinated effort. The most knowledgeable members of the health professions, the ablest men in the field of professional management and business skills, sound progressive community planners, and political leaders of vision must join hands in a common effort."

CHAIRMAN PULLY: Thank you. Dr. Raper and Dr. Koomen, for an excellent report on what's going on in Raleigh and how it reaches down in our own counties.

This next phase of our program is one in which we all take a great deal of pleasure.

At this time we are recognizing excellence among exhibitors, excellence among physicians who have worked long and arduously in the practice of medicine. At this time, I'd like to call on Dr. Simmons Patterson to present the Scientific Awards.

DR. F. M. SIMMONS PATTERSON: It is my pleasant task as Chairman of the Committee on Scientific Awards to recognize those exhibits and presentations that are deemed worthy of these awards.

I think it's wise to state briefly at this time how the recipients of these awards are selected.

In regard to the presentations at the Medical Society meeting, we asked the chairmen of each of the specialty sections to appoint a committee to judge the papers at the specialty meetings. The one selected by the specialty committee is then given to the Committee on Scientific Awards and this committee selects the winners from the group presented.

Now, first of all, I would like to present the Moore County Medical Society award. This award is a medal certificate and is presented on the basis of the best all around scientific paper presented at the 115th Annual Session of the Medical Society of the State of North Carolina. In other words, is made on the presentation made not at this meeting, but at the meeting the year before.

The recipient of this award is Dr. Richard Kemp for his presentation of, "A Review of Possible Mechanisms of Halothane Toxicity".

[Dr. Kemp could not be present for the presentation and will receive his award later.]

The next one is the Wake County Award, the Cooper Memorial award, on the best scientific paper on the

subject of, "Preventive Medicine in Maternal and Child Health and Public Health". This award is made to Dr. Arthur C. Christakos for his paper, "Practical Cyto-Genetics".

If Dr. Christakos is present, will he please come forward so I may present the award?

[Whereupon Dr. Arthur C. Christakos came forward to receive the award.] [Applause]

The next award is the Gaston County Medical Society award for the best presentation for the scientific or educational subject of a medical nature through the use of the media of visual presentation.

This is presented today to Dr. Sylvester Vala for his presentation entitled, "Experience in Multiphasic Screening in North Carolina".

Dr. Vala!

[Whereupon Dr. Sylvester Vala came forward to receive the award.] [Applause]

I will now represent Dr. Josephine E. Newell, who is Chairman of the Committee on Exhibits. This year two presentations will be made of equal stature.

These are given for the best scientific exhibits.

The first presentation is made to the scientific exhibit entitled, "The Alcoholic Patient—A Surgical Challenge" submitted by Dr. Arthur Lowenfels and associates. Dr. Edward Sottile of Valhalla, New York, will accept this award.

[Whereupon Dr. Edward Sottile came forward to receive the award.] [Applause]

The next presentation is for the exhibit entitled, "Scintillation Camera in Pediatric Renal Disease". This is an exhibit of Ochsner Clinic, New Orleans and Dr. Paul Murison will accept this award.

[Whereupon Dr. Paul J. Murison came forward to receive the award.] [Applause]

CHAIRMAN PULLY: Thank you, Dr. Paterson.

At this time, I would like to call on Dr. A. J. Tannebaum, Chairman of the Committee on AMA-ERF.

Dr. Tannebaum!

DR. A. J. TANNEBAUM: Good morning.

I don't have any particular speech to make. I just have to make a presentation of money to the three medical schools, but I do want to put a plug in for the AMA-ERF, which isn't highly publicized amongst the people of the State.

I do want to say this is an educational and research foundation.

In this age of the "generation gap" and all the other gaps and problems, very little is ever mentioned about the gap between the ever-increasing needs of our educational facilities and the money available.

When we were graduated we took on this obligation to pass on the information to those who were interested in the study of medicine. In order to pass on this information, today, it costs an awful heck of a lot of money and it seems there's a gap money-wise—money to spend on facilities, on schools, and students who need money to go into medical school.

It seems that one-third of the medical students need additional financial help to go to school.

Well, of course, we try to get as much money as we can from charity foundations, or people and mem-

bers who are interested in furthering the progress of medicine in our country, which by the way is greater than any other country and I've seen most of them.

So, we have this educational and research foundation where people can contribute money and not even specifying which medical school it should go to. The central committee then divides up the money between all the medical schools.

So the dean can then take this money and use it as he needs to to improve the facilities and the type of student he has with fellowships and other facilities.

We collected close to one million dollars in this foundation. Now, for every dollar contributed some outfit will give us about \$12½ additional loan money and then as the students repay this money, this money is again put into use and we can keep on having the best medical students and it costs about \$5,000 a year for a student to go to medical school today and we have collected approximately \$18,000 from people giving small money in this state and it's my privilege to tell you that Guilford County, Ladies Auxiliary, has done a remarkable job in publicizing this thing. I would just pass that information on to you so that perhaps the Auxiliaries in the other counties in years to come will try to do the same thing and maybe we can double these figures.

It gives me a lot of pleasure to present these checks, firstly to Dr. Goldner of Duke. Would you please accept this check for \$6,754.

[Whereupon Dr. J. Leonard Goldner, Duke, came forward to accept the award.] [Applause]

DR. J. LEONARD GOLDNER: Thank you, very much.

DR. TANNEBAUM: And, University of North Carolina. Dr. Patterson will accept this check for \$5,652.

[Whereupon Dr. Patterson then came forward to accept the award.] [Applause]

We hope we can double this next year.

DR. PATTERSON: Thank you, very much.

DR. TANNEBAUM: Bowman Gray. Dr. Shaffner will accept this check for \$7,186.

[Whereupon Dr. Shaffner then came forward to receive the award.] [Applause]

DR. SHAFFNER: Thank you, very much.

DR. TANNEBAUM: Thank you.

CHAIRMAN PULLY: Thank you, Dr. Tannebaum.

At this time the Chair takes particular pleasure in introducing Dr. Frederick C. Hubbard, Chairman of the Committee of Physicians on Nursing of the Medical Society of the State of North Carolina.

Dr. Hubbard!

DR. FREDERICK C. HUBBARD: Madam Chairman, Ladies and Gentlemen:

It's a great pleasure for me to talk about what I'm getting ready to say now; that is about this Nursing Recognition Week in North Carolina and what our Society has done about it.

As you probably know, the General Assembly dedicated the week of May 11 as Nursing Recognition Week in North Carolina.

Well that gave the Committee of Physicians on Nursing of the Medical Society the idea of really

putting on a recognition and so we set plans and we contacted the presidents of each county medical society and asked them to appoint a chairman to the committee to decide on the Nurse of the Year and to remember her in several different ways during that week.

The nursing profession has, of course, as you know, grown up in the last thirty years, and they're working on upgrading the nursing schools over the state and this is a recognition now and this is a state rather than a national program.

The nurses are busy in upgrading their schools. The medical profession is interested in it too. We're going along with them to help them in every way possible in elevating their stature.

We will come to the real object of this meeting in a moment and that's the presentation of the award.

I don't know that I can possibly say anything you don't already know about our close association with nurses and we couldn't practice medicine without the nurses. They help us out, they assist us in many, many different ways.

Now for the presentation of these awards.

First, I wish to present a special award for distinguished service to nursing in North Carolina to Mrs. Elizabeth Hill of Statesville, North Carolina.

Mrs. Hill, most of you know or know of. She has had a long history not only in nursing but in every field of nursing in North Carolina.

It's a particular joy for me to introduce her because she assisted me several years ago at various operations I did in the state.

[Whereupon Mrs. Elizabeth Hill then came forward and after reading the citation, Dr. Hubbard then presented it to her.] [Applause]

Now, we come next to the "Nurse of the Year" award.

It wasn't easy of course to decide who this award should go to. We had a number of wonderful records, recommendations, presented. The central committee chose the recipient of the "Nurse of the Year" award after many hours of deliberation.

You would be surprised at how many honors and accomplishments a lot of our nurses in North Carolina have.

The decision they made though was a very fine one and I'm sure is deserved.

I am going to ask Mrs. Carolyn Roberts Green to come to the front.

[Whereupon Mrs. Carolyn Roberts Green then came forward to receive the citation.]

This citation briefly covers her career and was compiled by some of her best friends who know her better of course than I do, certainly.

[Whereupon Dr. Hubbard then read the citation and then presented it to Mrs. Green.] [Applause]

MRS. CAROLYN ROBERTS GREEN: Thank you.

Dr. Hubbard and Members of the North Carolina Medical Society:

Thank you for recognizing all the nurses of North Carolina today in such a respectful manner. I am deeply honored to have been selected as their repre-

sentative to accept this individual award for me.

My career as a public health nurse has been very satisfying. It has also been educational, interesting and I must admit that I've had fun participating in activities to nursing outside of my job at the Guilford County Health Department.

Your action as the Medical Society to honor the nurses of this State, in addition to strengthening the doctor-nurse relationship, should also it seems to me act as a booster in the recruitment of nurses.

I would like to see your Society Committee of Physicians on Nursing give some thought as to what they would suggest the nurses chosen over the state to represent their counties might do individually in the area of recruitment.

It seems such a shame not to capitalize on all the publicity when North Carolina needs nurses so desperately.

In addition to loving, honoring and obeying us you might as well do as most husbands and put us to work also!

I offer this as a suggestion that you continue this recognition each year and I understand you do plan to do so.

Enticing men and women into nursing is only a part of our problem; keeping them there is even a more major concern to us.

Even though there are over a million registered professional nurses in the United States, only a little more than half of the nurses are in active practice and about a fourth of these are working part-time.

This is warning enough that all is not right in nursing.

Nurses are frustrated because of not being able to take care of patients, the real reason they entered nursing to begin with. They worry about the quality of care patients are receiving. It is certain that we cannot liken modern medicine with crab grass plants anymore than we can time it by the traditional country doctor's pocket watch.

Over the past several years, I have worked with many nurses in our state. In general, those nurses who are most active in upgrading the nursing profession, are those who participate in nursing activities outside the regular job responsibilities and those who belong to their professional organizations.

These same nurses are the ones who will give your patients the best nursing care in your offices, hospitals and agencies because they are spending their extra energies on improving patient care and nursing practice. They are concerned about the many changes nursing must face in the future in order to keep up with newer trends in education and newer methods of delivering medical care.

Keeping this in mind, I challenge you as employers of nurses to encourage perhaps even insist that they at least belong to their professional organization.

A large number of us in nursing are involved and concerned and do not have to be encouraged. As nurses we have had to take a look at where we would like to go and how we can move toward our goals in an orderly manner and give quality nursing care in

North Carolina.

As a Medical Society, you have demonstrated to the nurses of this State that you, as physicians, also have care and concern, respect and appreciation for the nursing profession.

I speak for all the nurses when I say again thank you for the recognition and for providing us with further incentive to be better nurses.

And, Now, Dr. Hubbard, I felt it only fitting that the first North Carolina Nurse of the Year chosen by the Medical Society should give to the Chairman of the Physicians Committee on Nursing a gift, so my dear Dr. Hubbard, you're about to become the owner of an original artwork by Carolyn.

It is done in acrylic and it is a farmer boy from North Wilksboro. He's wearing blue jeans, a plaid shirt and brogans. He's carrying a pig in his arms and on it is written my wish to you, Dr. Hubbard, and to the other members of this Society during these trying times of Medicare and Medicaid, it says simply:

May you always live high on the hog!

[Laughter] [Applause]

DR. HUBBARD: Thank you, very much.

It's wonderful how she has portrayed here the origin of me and the rest of the fellows on the farm!

I think it's a wonderful piece of art. It carries the story right back to the origin! [Laughter]

I want to thank you folks for your attendance here and assure you that the cooperation between the Medical Society of the State of North Carolina and the North Carolina Nurses Association is better and better all the time.

We're working toward the same goals and I'm sure sooner or later we'll meet them.

Thank you very much. [Applause]

CHAIRMAN PULLY: The Chair would also like to commend the remarks of the Nurse of the Year and the Committee on Nurses will undoubtedly carry out the suggestions she has made. I'm sure the Medical Society will support all of the recommendations that she has made.

At this time, it gives me a particular pleasure to introduce Dr. Charles W. Styron, who will give the presentation of the Fifty Year Club.

DR. STYRON: Madam Chairman, I am particularly impressed by this program.

As Secretary of the Medical Society and in view of the authority invested in me by the Executive Council and the House of Delegates, it gives me great pleasure to award to the various members of the Fifty Year Club a jewel and scroll.

A jewel to be worn with pride and distinction amongst your fellow physicians, friends, families and so on and the proud attainment of having demonstrated intellect, character, energy, ability as great physicians to have survived fifty years of difficult practice.

[Whereupon as Dr. Styron read off the names of the new members of the Fifty Year Club and presented those present their jewel and scroll.] [Applause]

Thank you, very much and Madam Chairman, thank you for the privilege of making this presentation.

CHAIRMAN PULLY: I would like to ask for a five

minute recess at this time before we start our group of three distinguished speakers.

[There followed a ten minute recess.]

At this time, I'd like to reconvene the second phase of our morning's program. I will call on Dr. Ed. Beddingfield to introduce our speakers.

DR. BEDDINGFIELD: Madam Vice President, Members at the podium, Ladies and Gentlemen:

We have a good program for this Third General Session.

Our first speaker certainly is well known to North Carolinians, although he is a citizen of the world having been all over this country and abroad, but we're lucky to have Leonard Goldner as a resident of North Carolina.

He's currently Professor of Orthopedic Surgery and heads the department at the Duke University Medical Center. He also currently is the President of the Southern Medical Association.

He speaks to us this morning on "The Physician and the Law".

Dr. Goldner!

[Whereupon Dr. J. Leonard Goldner then read his prepared address which will be submitted to the North Carolina Medical Journal for publication.] [Applause]

Thank you, Dr. Goldner.

I'm going to take one second to tell a story about Dr. Goldner. He doesn't know that I know, but he has pointed out clearly to us the importance particularly in cases that might end up in the courtroom of a very complete and very accurate history with all the facts.

About eight or nine years ago, there was a serious automobile accident outside Durham. The patient was taken to Duke Hospital and was on Halsted where my sister who was a chief nurse—Len didn't know this—and a medical student had taken the history. Dr. Goldner made rounds the next morning and the student was reciting in great and rather prolonged detail as he had been taught by Dr. Goldner all the meticulous facts about the history, including the social and family history, although it was obviously a trauma case, telling not only what the parents died of but what the grandparents died of and finally, the story is, Dr. Goldner could take it no longer and turned around and asked the nurse who happened to be my sister, and said, "Mrs. Crispin, what did your grandmother have?"

My sister is a little fast on the uptake, she said, "My mother!" [Laughter]

Most of you have been vaguely aware that something different has been going on at the American Medical Association over the last couple of years.

Some have been pleased and some have been perplexed, some perhaps have not been pleased. I think that our next speaker personifies perhaps the new look and the new posture of the American Medical Association, which to me is very, very pleasing.

I suppose it was partly by accident and partly by design that we're all sitting on the right this morning and whatever your fears about the American Medical

Association and what its direction is, just let me tell you that if you get to the right of the AMA, you fall off the edge! [Laughter]

The name of the Wilbur family is an important name in this country, in government, in medicine and very recently and for a good many years in the American Medical Association, in the highest policy making bodies in this country.

Our speaker this morning, although born in New England, has been identified pretty much with California but he has been very active in the practice of medicine.

Dick Wilbur is an internist, subspecialty, and in many publications in the area of gastroenterology. I have been pleased as have many, many others that he has been prevailed upon to, for the time being anyhow, break with his active clinical practice and to devote full-time to our professional organization, the American Medical Association as the Assistant Executive Vice President to Bert Howard at 535 North Dearborn Street.

I have seen him in action. I have heard him on television on the AMA tapes that are sent around. I have been pleased to hear him appear as a spokesman for me and for the rest of you AMA members.

So, Dr. Dick Wilbur, at this time is going to speak to us about "Current Trends in the Socio-Economic Aspects of Health Care".

Dick, we're glad to have you in North Carolina.

[Whereupon Dr. Richard S. Wilbur then read his prepared address which will be submitted to the North Carolina Medical Journal for publication.] [Applause]

Thank you, Dr. Wilbur.

We're now in a hiatus between our two out-of-state speakers and I'd like to explain to them, that it's their first visit to Pinehurst for both of them and I think both of them have enjoyed Pinehurst. The difficulty the Society has in getting men of your calibre to come here—they enjoy coming here, but the attractions of Pinehurst are equally attractive to our members and I want to assure both of you that the message that you bring to us here today will extend past the group that are here in this room and will be in our Journal.

I made reference awhile ago to the fact that my sister who's working at Dr. Goldner's institution was a nurse and all of my family members are in some facet of health care—my parents and all the siblings with one exception. A younger brother is an aeronautical engineer who has been with NASA in the space program since they began things down at the Cape a decade ago.

He is responsible for our next speaker. Right after the meeting last year, I was talking with my brother and I told him because of his activities particularly in the Apollo Program. I had more than a passing interest in what went on down at the Cape and being a physician I was interested in the medical applications that went on down there.

I told him I wanted him to pick me out a doctor to talk to us this year at Pinehurst and without any hesitation he said, "Well, you want to get Al Harter!"

So, we're very pleased to have Dr. Harter with us

this morning.

You know, it strikes me that there's quite a bit in common between Dr. Harter's role and your role. Dr. Wilbur—you both stem from New England. You're both internists. In a sense, Dr. Wilbur is your employee by virtue of your AMA views and Dr. Harter is your employee in the sense I presume most of you attack cases.

Both of them left clinical practice in internal medicine to bring their particular talents to a particular area where their medical talents were needed that was new.

Dr. Wilbur's case was a better interface between medicine and government, and Dr. Harter's instance the talents of medicine and internal medicine to a patient who may be 250,000 miles away when he develops a urinary tract infection, as happened in the last mission.

Dr. Harter, as I have indicated, grew up in New England. He received his M.D. degree at the University of Buffalo; trained in internal medicine at the well known Hitchcock Clinic at Dartmouth, New Hampshire; actively practiced internal medicine in Massachusetts for six years before joining NASA five years ago.

He has held several important positions in the launch site of medical operations at the Kennedy Space Center having moved up now to the chief of launch site of medical operations at Kennedy Space Center, NASA.

We're glad to have him talk to us about "Man in Space".

[Whereupon Dr. Alan C. Harter then read his prepared address, supplementing with slides. His paper will be submitted to the North Carolina Medical Journal for publication.] [Applause]

CHAIRMAN PULLY: It's superfluous for me to add, but as a threat over accident cases and letters to attorneys and worry about that is being said about the medical profession today and our standing in the community, it will do us good to pause and reflect on Dr. Harter's words and the significance of these individuals and what the future brings for the next generation to come.

One event we have looked forward to all morning is the presentation of Dr. Shaffner, our new President for 1970-71.

Dr. Shaffner!

[Whereupon the entire assemblage then accorded Dr. Shaffner a standing ovation.]

PRESIDENT SHAFFNER: Dr. Pully, Dr. Beddingfield;

I really cannot start what I am going to say without sharing Dr. Harter's excitement for the future. You remember I said last night let your imagination run; he ran it for us this morning and it really is fascinating.

Also, I would make the remark that there are advantages and disadvantages to being the last man on the program. The main disadvantage is that everybody has had an opportunity to preempt what you're going to say and then you have to write your speech all

over again.

But the advantages of it are that you can get the feeling of the people who are here and the programs that have been delivered and, after all, since I am the last on the program, I've got the last word!

I was heartened and I am heartened now by two things that was said in the general session this morning by Dr. Stead and one by Dr. Wilbur.

If you remember, Dr. Stead said that the trouble with some of this planning was that the people doing the planning, though they may be doctors, they are doctors who didn't render patient care.

And, Dr. Wilbur said the same thing and I'm encouraged that Dr. Stead is trying to get in on the planning and I am encouraged that Dr. Wilbur, who has had experience in patient care, is heading the AMA part of the thrust of the planning.

In short, I am happy that they are helping present the doctors' point of view which is the subject of my remarks this morning.

So if what I say you've heard before, I'm saying it from a doctor's point of view.

[Whereupon President Shaffner then read his prepared address which will be submitted to the North Carolina Medical Journal for publication.] [Applause]

At this time, we have a very brief installation for those officers who have not been installed and I would ask to come forward at this time, in this area in front of the podium, Dr. George Gilbert, to be installed as the First Vice President; Dr. James G. Jones, Second Vice President; Dr. Harvey Estes, as Secretary; Dr. James Davis as Speaker of the House of Delegates; and Dr. Chalmers Carr as the Vice Speaker of the House of Delegates.

[Whereupon the newly elected officers assembled in the front of the room.]

Gentlemen, this is rather like a marriage ceremony except you don't have to repeat the vows, you just give the "I do!"

I would urge you to pay careful attention as I read this oath of office and I will put the question to you at the end of oath of office as to if you accept the oath for the position, and you will reply "I do!"

I read to you the oath of office:

I SOLEMNLY SWEAR THAT I WILL CARRY OUT THE DUTIES OF MY OFFICE TO THE BEST OF MY ABILITY. I SHALL UPHOLD THE CONSTITUTION OF THE UNITED STATES OF AMERICA AND THE CONSTITUTION AND BY-LAWS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA AT ALL TIMES. I SHALL CHAMPION THE CAUSE OF FREEDOM IN MEDICAL PRACTICE AND FREEDOM FOR ALL MY FELLOW AMERICANS.

What say you?

[Whereupon all the newly elected officers replied "I do!"]

Thank you, very much. I congratulate you and declare you duly installed officers of the Society.

[Applause]

CHAIRMAN PULLY: At this time, I declare this part of the meeting closed.

[The meeting adjourned a twelve-forty-five o'clock.]

EARLY HISTORY OF THE NORTH CAROLINA MEDICAL SOCIETY FROM ORGANIZATION TO 1804

Date	Place	President	Vice Presidents	Corresponding Secretary	Secretary	Recording Secretary	Treasurer	Censors
Dec. 17, 1799. or April 16, 1800	Raleigh	Richard Fenner	Nathaniel Loomis John Claiborne	Calvin Jones		Wm. B. Hill	Cargill Massenbourg	Sterling Wheaton James Webb Jas. John Pasteur Jason Hand
Dec 1, 1800	Raleigh	Richard Fenner			Sterling Wheaton			
Dec 1, 1801	Raleigh	John C. Osborne	Thomas Mitchell Richard Fenner	Calvin Jones	Sterling Wheaton		Cargill Massenbourg	James Webb John Sibley
1802	Raleigh	John C. Osborne		Calvin Jones				
1803	Raleigh	John C. Osborne		Calvin Jones				
1804	Raleigh	John C. Osborne		Calvin Jones				

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1970

*Missing Data Not to be Found in Record

Date	Place of Meeting	Number in Attendance	President	Vice Presidents*	Secretary	Treasurer*	Members on Roll*	Honorary Members*	Honorary Fellows*
1849	Raleigh	25	F. J. Hill		W. H. McKee		25		
1 1850	Raleigh	21	E. Strudwick	F. J. Haywood, C. E. Johnson, J. E. Williamson, W. G. Thomas	W. H. McKee	W. G. Hill	38	9	
2 1851	Raleigh	23	E. Strudwick	C. E. Johnson	W. H. McKee	W. G. Hill	46	0	
3 1852	Wilmington	38	J. E. Williamson	Thomas N. Cameron, William G. Hill, Johnston B. Jones, N. J. Pittman	E. B. Haywood	J. J. W. Tucker	72	12	
4 1853	Fayetteville	24	J. E. Williamson	William G. Hill, Johnston B. Jones, J. B. G. Myers, N. J. Pittman	W. W. Harris	Daniel Dupree	80	14	
5 1854	Raleigh	37	J. H. Dickson	N. J. Pittman, J. B. G. Myers, J. Graham	S. S. Satchwell	Daniel Dupree	84	17	
6 1855	Salisbury	23	J. H. Dickson	Tull, A. D. McLean, J. Graham	S. S. Satchwell	J. B. Dunn	96	18	
7 1856	Raleigh	35	C. E. Johnson	Marcellus Whitehead, P. R. Gibson, Johnston B. Jones, O. F. Manson	S. S. Satchwell	J. B. Dunn	101	22	
8 1857	Edenton	25	C. E. Johnson	Marcellus Whitehead, O. F. Manson, H. W. Faison, E. T. Gibson	W. G. Thomas	J. B. Dunn	113	16	
9 1858	New Bern	69	W. H. McKee	Edward Warren, C. W. Graham, Caleb Winslow, A. B. Pierce	W. G. Thomas	J. B. Dunn	172	18	
10 1859	Statesville	81	W. H. McKee	James G. Ramsey, P. E. Hines, J. R. Mercer, W. T. Howard	W. G. Thomas	C. W. Graham			
11 1860	Washington	64	N. J. Pittman	P. T. Henry, R. H. Winborne, M. Whitehead, T. S. Leach	W. G. Thomas	C. W. Graham	233	18	
12 1861	Morganton	23	N. J. Pittman	J. J. Summerell, C. T. Murphy, G. W. Hodges, W. A. B. Norcom	W. G. Thomas	C. W. Graham	244	18	
13 1866	Raleigh	20	J. J. Summerell	E. Burke Haywood, R. H. Winborne, W. L. Barrow, J. W. Jones	W. G. Thomas	C. W. Graham			
14 1867	Tarboro	41	W. G. Thomas		S. S. Satchwell	C. W. Graham	288	11	
15 1868	Warrenton	27	S. S. Satchwell	Hugh Kelly, George A. Foote, Charles J. O'Hagan, J. H. Baker	Thomas F. Wood	J. W. Jones			
16 1869	Salisbury	36	E. B. Haywood	Thomas E. Wilson, A. B. Pierce, C. T. Murphy, M. A. Locke	Thomas F. Wood	J. W. Jones			
17 1870	Wilmington	38	C. J. O'Hagan	E. A. Anderson, P. N. Luckey, W. R. Sharpe, R. L. Payne	Thomas F. Wood	J. W. Jones			
18 1871	Raleigh	35	Hugh Kelley	D. N. Patterson, R. C. Pearson, J. B. Seavy, G. L. Kirby	Thomas F. Wood	J. W. Jones			
19 1872	New Bern	34	W. G. Hill	H. W. Faison, R. I. Hicks, G. H. Macon, W. A. B. Norcom	James McKee	J. W. Jones			
20 1873	Statesville	43	M. Whitehead	W. T. Ennett, William Little, Charles Duffy, P. T. Jerman	James McKee	H. T. Bahnson			
21 1874	Charlotte	56	W. A. B. Norcom	J. B. Jones, R. F. Lewis, C. G. Cox, J. L. Knight	James McKee	H. T. Bahnson			
22 1875	Wilson	60	J. W. Jones	Walker Debnam, J. A. Gibson, William Little, D. N. Patterson	James McKee	H. T. Bahnson	148	5	
23 1876	Fayetteville	33	Peter E. Hines	J. H. Baker, G. G. Smith, T. D. Haigh, J. K. Hall	James McKee	H. T. Bahnson	157	4	
24 1877	Salem	42	George A. Foote	J. K. Hall, B. W. Robinson, A. Holmes, A. A. Hill	James McKee	A. G. Carr	177	4	
25 1878	Goldsboro	79	R. L. Payne	E. M. Rountree, Richard Anderson, S. B. Flowers, L. A. Stith	J. J. Picot	A. G. Carr	194	6	
26 1879	Greensboro	109	Chas. Duffy, Jr.	J. A. Gibson, Willis Alston, James McKee, A. A. Hill	J. J. Picot	A. G. Carr	198	6	
27 1880	Wilmington	105	J. F. Shafer	J. K. Hall, W. C. McDuffie, W. R. Wilson, R. F. Lewis	J. J. Picot	A. G. Carr	225	6	
28 1881	Asheville	92	R. B. Haywood	J. E. McKee, W. H. Lilly, R. H. Speight, W. I. H. Bellamy	J. J. Picot	A. G. Carr	254	6	
29 1882	Concord	65	Thos. F. Wood	T. J. Moore, D. J. Cain, S. E. Evans, John McDonald	J. J. Picot	A. G. Carr	297	7	
30 1883	Tarboro	112	J. K. Hall	A. W. Knox, J. M. Hadley, E. S. Foster, John Whitehead	J. J. Picot	A. G. Carr	310	7	
31 1884	Raleigh	112	A. B. Pierce	F. W. Potter, G. W. Graham, R. Dillard, G. W. Long	J. J. Picot	A. G. Carr	348	7	
32 1886	Durham	173	W. C. McDuffie	James McKee, T. E. Andersoo, W. H. Whitehead, A. G. Carr	W. C. Murphy	R. L. Payne, Jr.	424	6	

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1970—Continued

*Missing Data Not to be Found in Record

Date	Place of Meeting	Number in Attendance	President	Vice Presidents	Secretary	Treasurer	Members on Roll July 15	Honorary Members	Honorary Fellows*
33 1886	New Bern	113	Joseph Graham	H. T. Bahnson, L. J. Picot, J. L. McMillan, W. W. Faison	J. M. Baker	R. L. Payne, Jr.	438	7	-----
34 1887	Charlotte	112	H. T. Bahnson	G. G. Smith, J. L. Nicholson, C. M. Van Poole, H. B. Ferguson	J. M. Baker	R. L. Payne, Jr.	452	7	-----
35 1888	Fayetteville	133	T. D. Haigh	W. T. Ennett, J. A. Dunn, T. E. Anderson	J. M. Baker	C. M. Van Poole	306	6	-----
36 1889	Elizabeth City	50	W. T. Ennett	W. J. Jones, S. W. Stevenson, G. W. Long	J. M. Baker	C. M. Van Poole	410	6	-----
37 1890	Oxford	160	G. G. Thomas	R. L. Payne, Jr., Richard Dillard, S. D. Booth	J. M. Hays	C. M. Van Poole	414	6	-----
38 1891	Asheville	135	R. H. Lewis	S. W. Battle, J. L. Nicholson, W. H. Lilly	J. M. Hays	C. M. Van Poole	422	6	-----
39 1892	Wilmington	162	W. T. Cheatham	T. S. Burbank, J. W. Long, W. H. H. Cobb, W. D. Hillard	J. M. Hays	C. M. Van Poole	431	6	-----
40 1893	Raleigh	221	J. W. McNeill	W. C. Galloway, H. H. Harris, J. M. Hadley, Thomas Hill	R. D. Jewett	M. P. Perry	447	5	3
41 1894	Greensboro	166	W. H. H. Cobb	J. A. Hodges, R. W. Tate, Willis Alston, M. H. Fletcher	R. D. Jewett	M. P. Perry	454	5	3
42 1895	Goldsboro	---	J. H. Tucker	J. Howell Way, W. H. Harrell, O. McMullan, C. A. Misenheimer	R. D. Jewett	M. P. Perry	436	7	3
43 1896	Winston-Salem	158	R. L. Payne	S. D. Booth, J. P. Murgoe, I. V. Burroughs, J. E. Grimsley	R. D. Jewett	M. P. Perry	452	7	3
44 1897	Morehead City	103	P. L. Murphy	J. C. Walton, A. A. Kent, M. R. Adams, B. L. Long	R. D. Jewett	M. P. Perry	406	6	3
45 1898	Charlotte	---	Francis Duffy	E. C. Register, A. T. Cotton, J. H. B. Knight, F. H. Russell	R. D. Jewett	M. P. Perry	437	6	21
46 1899	Asheville	152	L. J. Picot	I. W. Faison, J. W. White, H. H. Dodson, W. C. Brownson	Geo. W. Presley	G. T. Sikes	489	6	16
47 1900	Tarboro	115	George W. Long	C. M. Van Poole, James M. Parrott, T. B. Williams, W. D. Hillard	Geo. W. Presley	G. T. Sikes	482	6	21
48 1901	Durham	186	Julian M. Baker	M. H. Fletcher, C. A. Julian, D. A. Stanton, E. M. Summerell	Geo. W. Presley	O. T. Sikes	515	5	18
49 1902	Wilmington	147	Robert S. Young	A. G. Carr, E. D. Dixon-Carroll, I. M. Taylor, J. M. Parrott	Geo. W. Presley	G. T. Sikes	546	5	20
50 1903	Hot Springs	155	A. W. Knox	E. G. Moore, C. A. Julian, W. W. McKenzie, J. L. Nicholson	J. Howell Way	G. T. Sikes	530	6	19
51 1904	Raleigh	326	H. B. Weaver	John Hey Williams, John C. Rodman, S. F. Pfuhl	J. Howell Way	G. T. Sikes	1,033	8	17
52 1905	Greensboro	361	David T. Tayloe	C. A. Julian, John T. Burrus, I. W. Faison	J. Howell Way	G. T. Sikes	1,175	8	17
53 1906	Charlotte	406	E. C. Register	L. B. M. Brayer, W. H. Cobb, Jr., W. O. Spencer	J. Howell Way	G. T. Sikes	1,234	8	16
54 1907	Morehead City	217	Samuel D. Booth	C. M. Strong, J. E. McLaughlin, W. F. Hargrove	David A. Stanton	H. McK. Tucker	888	7	16
55 1908	Winston-Salem	372	J. Howell Way	J. E. Stokes, J. A. Turner, W. H. Dixon	David A. Stanton	H. McK. Tucker	998	7	28
56 1909	Asheville	337	J. F. Highsmith	C. M. Van Poole, D. A. Garrison, D. O. Dees	David A. Stanton	H. McK. Tucker	1,067	7	25
57 1910	Wrightsville Beach	276	J. A. Burroughs	E. I. Wood, John Q. Myers, L. D. Wharton	David A. Stanton	H. D. Walker	1,080	8	35
58 1911	Charlotte	412	E. J. Wood C. M. Van Poole	J. V. McGougan, W. E. Warren, L. N. Glenn	David A. Stanton	H. D. Walker	880	8	45
59 1912	Hendersonville	296	A. A. Kent	J. P. Monroe, W. P. Horton, J. G. Murphy	David A. Stanton	H. D. Walker	950	8	44
60 1913	Morehead City	232	J. P. Munroe	F. R. Harris, E. S. Bullock, L. B. Morse	John A. Ferrell	H. D. Walker	1,133	8	40
61 1914	Raleigh	431	J. M. Parrott	E. T. Dickinson, J. T. J. Battle, D. E. Sevier	John A. Ferrell	H. D. Walker	1,228	8	47
62 1915	Greensboro	443	L. B. McBrayer	J. J. Phillips, C. W. Moseley, S. M. Crowell	John A. Ferrell	H. D. Walker	1,221	9	68
63 1916	Durham	408	M. H. Fletcher	J. L. Nicholson, L. N. Glenn, W. H. Hardison	Benj. K. Hays	W. M. Jones	1,228	10	79
64 1917	Asheville	280	Charles O'H Laughinghouse	D. J. Hill, J. L. Spruill, J. H. Shuford	Benj. K. Hays	W. M. Jones	1,271	11	81
65 1918	Pinehurst	291	I. W. Faison	Wm. deB. MacNider, Jos. B. Greene, Ben F. Royal	Benj. K. Hays	W. M. Jones	1,087	11	81
66 1919	Pinehurst	335	Cyrus Thompson	J. W. Halford, T. W. Davis, A. McN Blair	Sec.-Treas.	Acting Sec.-Treas	1,306	11	100
67 1920	Charlotte	470	C. V. Reynolds	H. D. Walker, F. Stanley Whitaker, Thos. I. Fox	Benj. K. Hays	L. B. McBrayer	1,497	12	100
68 1921	Pinehurst	404	T. E. Anderson	C. S. Lawrence, W. H. Ward, J. M. Manning	Benj. K. Hays	L. B. McBrayer	1,491	12	93
69 1922	Winston-Salem	507	H. A. Royster	W. T. Parrott, B. C. Nalle, J. R. McCracken		L. B. McBrayer	1,571	12	100
70 1923	Asheville	356	J. W. Loog	F. M. Hanes, T. C. Johnson, B. L. Long		L. B. McBrayer	1,592	9	101
71 1924	Raleigh	525	J. V. McGougan	J. L. Spruill, Eugene B. Glenn, D. A. Garrison		L. B. McBrayer	1,604	9	106
72 1925	Pinehurst	550	Albert Anderson	W. L. Dunn, A. E. Bell, K. G. Averitt		L. B. McBrayer	1,657	10	116
73 1926	Wrightsville Beach	445	Wm. deB. MacNider	J. P. Matheson, W. W. Dawson, H. H. Bass		L. B. McBrayer	1,663	10	107
74 1927	Durham	653	John Q. Myers	J. W. Carroll, A. Y. Liville, C. H. Cocke		L. B. McBrayer	1,691	10	121
75 1928	Pinehurst	811	John T. Burrus	G. H. Macon, R. F. Leinbach, W. R. Griffin		L. B. McBrayer	1,738	11	143
76 1929	Greensboro	871	Thurman D. Kitchin	W. L. Dunn, Asheville, D. T. Tayloe, Jr., Washington, W. D. James, Hamlet		L. B. McBrayer	1,886	11	146
77 1930	Pinehurst	701	L. A. Crowell	W. B. Murphy, Wm. E. Warren, N. B. Adams		L. B. McBrayer	1,711	11	154

HISTORY OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA FROM 1849 TO 1970—Continued

Date	Place of Meeting	Number in Attendance	President	President-Elect	Vice Presidents	Sec.-Treas.	Members on Roll July 15	Honorary Members	Life Members
78 1931	Durham	714	J. G. Murphy	M. L. Stevens	C. A. Julian J. W. Davis	L. B. McBrayer	1,690	10	164
79 1932	Winston-Salem	740	M. L. Stevens	Jno. B. Wright	C. W. Banner W. W. Sawyer	L. B. McBrayer	1,569	10	166
80 1933	Raleigh	714	Jno. B. Wright	I. H. Mannings	J. R. McCracken	L. B. McBrayer	1,363	10	181
81 1934	Pinehurst	728	I. H. Manning	P. P. McCain	W. G. Suiter R. L. Felts	L. B. McBrayer	1,663	10	210
82 1935	Pinehurst	706	P. P. McCain	Paul H. Ringer	H. D. Walker J. F. McKay William Allan	L. B. McBrayer	1,619	10	215
83 1936	Asheville	683	Paul H. Ringer	C. F. Strosnider	J. K. Pepper E. S. Bullock	L. B. McBrayer	1,462	10	235
84 1937	Winston-Salem	767	C. F. Strosnider	Wingate M. Johnson	C. A. Woodard Jno. F. Brownsberger	L. B. McBrayer	1,503	7	263
85 1938	Pinehurst	802	Wingate M. Johnson	J. Buren Sidbury	R. B. McKnight J. F. Abel	T. W. M. Long	1,715	7	284
86 1939	Cruise to Bermuda	319	J. Buren Sidbury	William Allan	C. B. Williams M. D. Hill	T. W. M. Long	1,605	8	313
87 1940	Pinehurst	836	William Allan	Hubert B. Haywood	F. Webb Griffith Frank C. Smith	T. W. M. Long	1,661	7	311
88 1941	Pinehurst	755	Hubert B. Haywood	F. Webb Griffith	D. W. Holt T. C. Kerns	T. W. M. Long (1) I. H. Manning	1,700	7	309
89 1942	Charlotte	710	F. Webb Griffith	Donnel B. Cobb	Thos. DeL. Sparrow T. L. Carter	Roscoe D. McMillan	1,837	8	360
90 1943	Raleigh	736	Donnell B. Cobb	James W. Vernon	George S. Coleman Julian Moore	Roscoe D. McMillan	1,919	8	361
91 1944	Pinehurst	760	James W. Vernon	Paul F. Whitaker	Fred C. Hubbard George L. Carrington	Roscoe D. McMillan	1,982	8	363
1945	No meeting because of O.D.T. restrictions		Paul F. Whitaker	Oren Moore	Wm. H. Smith Zack D. Owens	Roscoe D. McMillan	1,811	7	383
92 1946	Pinehurst	889	Oren Moore		Wm. H. Smith Zack D. Owens	Roscoe D. McMillan	1,939	6	397
93 1947	Virginia Beach, Va.	444	Wm. M. Coppridge	Frank A. Sharpe	G. E. Bell J. B. Bullitt	Roscoe D. McMillan	2,191	7	404
94 1948	Pinehurst	920	Frank A. Sharpe (2)	James F. Robertson	V. K. Hart J. G. Raby	Roscoe D. McMillan	2,298	8	407
95 1949	Pinehurst	998	James F. Robertson	G. Westbrook Murphy	Joseph J. Combs Joseph A. Elliott	Roscoe D. McMillan	2,318	6	405
96 1950	Pinehurst	947	G. Westbrook Murphy	Roscoe D. McMillan	Ben F. Royal Joseph A. Elliott	Millard D. Hill	2,283	6	455
97 1961	Pinehurst	938	Roscoe D. McMillan	Frederic C. Hubbard	Joseph A. Elliot Henderson Irwin	Millard D. Hill	2,341	5	469
98 1952	Pinehurst	969	Frederic C. Hubbard	J. Street Brewer	Forest M. Houser Arthur Daughtridge	Millard D. Hill	2,326	6	476
99 1963	Pinehurst	1016	J. Street Brewer	Joseph A. Elliott	George W. Paschal John R. Bender	Millard D. Hill	2,673	6	486
100 1954	Pinehurst	1077	Joseph A. Elliott	Zack D. Owens	John F. Foster Julian A. Moore	Millard D. Hill	2,801	6	486
101 1955	Pinehurst	991	Zack D. Owens	J. P. Rousseau	George W. Paschal, Jr. Elias S. Faison	Millard D. Hill	2,896	6	507
102 1956	Pinehurst	1022	James P. Rousseau	Donald B. Koonce	E. W. Schoenheit Milton S. Clark	Millard D. Hill	3,058	7	561
103 1957	Asheville	867	Donald B. Koonce	Edward W. Schoenheit	John S. Rhodes O. Norris Smith	Millard D. Hill	3,127	8	522
104 1958	Asheville	781	Edw. W. Schoenheit	Lenox D. Baker	George W. Holmes Amos N. Johnson	Millard D. Hill	3,171	9	642
105 1959	Asheville	651	Lenox D. Baker	John C. Reece	Amos N. Johnson Kenneth B. Geddies	John S. Rhodes	3,211	10	251
106 1960	Raleigh	848	John C. Reece	Amos N. Johnson	Charles M. Norfleet, Jr. W. Walton Kitchin	John S. Rhodes	3,247	12	472
107 1961	Asheville	636	Amos N. Johnson	Claude B. Squires	Theodore S. Raiford Charles T. Wilkinson	John S. Rhodes	3,248	12	438
108 1962	Raleigh	746	Claude B. Squires	John R. Kernodle	John A. Payne, III J. Sam Holbrook	John S. Rhodes	3,339	9	425
109 1963	Asheville	714	John R. Kernodle	John S. Rhodes	H. Fleming Fuller Jacob H. Shuford	Charles W. Styron	3,491	9	431
110 1964	Greensboro	677	John S. Rhodes	T. S. Raiford	Wm. F. Hollister F. G. Patterson	Charles W. Styron	3,473	8	398
111 1966	Charlotte	738	T. S. Raiford	George W. Paschal, Jr.	Hubert McN. Poteat Wayne J. Benton	Charles W. Styron	3,616	8	390
112 1966	Asheville	545	George W. Paschal, Jr.	Frank W. Jones	W. Otis Duck John L. McCain	Charles W. Styron	3,597	12	339
113 1967	Pinehurst	644	Frank W. Jones	Robert A. Ross	David G. Welton Daniel A. McLaurin	Charles W. Styron	3,606	14	302
114 1968	Pinehurst	623	Robert A. Ross	David G. Welton	E. T. Beddingfield, Jr. James S. Raper	Charles W. Styron	3,642	13	298
115 1969	Pinehurst	577	David G. Welton	Edgar T. Beddingfield, Jr.	John Glasson Mark McD. Lindsey	Charles W. Styron	3,674	13	298
116 1970	Pinehurst	580	Edgar T. Beddingfield, Jr.	Louis deS. Shaffner	Robert P. Crouch Rose Pully	Charles W. Styron	3,711	14	289

†Died during his term of office; succeeded by E. J. Wood, first vice president

‡Died during term of office

(2) Died during term of office; succeeded by I. H. Manning. (2) Died during term of office; succeeded by James F. Robertson, president-elect.

ROSTER OF MEMBERS OF NORTH CAROLINA STATE BOARD OF HEALTH
FROM ORGANIZATION IN 1877 TO 1970

Name	Address	Appointed by	Term
S. S. Satchwell, M.D., President	Rocky Point	State Society	1877 to 1878
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1877 to 1878
Joseph Graham, M.D.	Charlotte	State Society	1877 to 1878
Charles Duffy, Jr., M.D.	New Bern	State Society	1877 to 1878
Peter E. Hines, M.D.	Raleigh	State Society	1877 to 1878
George A. Foote, M.D.	Warrenton	State Society	1877 to 1878
S. S. Satchwell, M.D., President	Rocky Point	State Society	1878 to 1884
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1878 to 1884
Charles J. O'Hagan, M.D., President	Greenville	State Society	1878 to 1882
George A. Foote, M.D.	Warrenton	State Society	1878 to 1882
Marcellus Whitehead, M.D.	Salisbury	State Society	1878 to 1880
R. L. Payne, M.D.	Lexington	State Society	1878 to 1880
H. G. Woodfin, M.D.	Franklin	Gov. Z. B. Vance	1878 to 1880
A. R. Ledoux, Chemist	Chapel Hill	Gov. Z. B. Vance	1878 to 1880
William Cain, Civil Engineer	Charlotte	Gov. Z. B. Vance	1878 to 1880
R. L. Payne, M.D.	Lexington	State Society	1881 to 1887
M. Whitehead, M.D., President	Salisbury	State Society	1881 to 1884
S. H. Lyle, M.D.	Franklin	Gov. T. J. Jarvis	1881 to 1883
William Cain, Civil Engineer	Charlotte	Gov. T. J. Jarvis	1881 to 1883
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1881 to 1883
J. W. Jones, M.D., President	Wake Forest	State Society	1883 to 1889
John McDonald, M.D.	Washington	State Society	1883 to 1889
S. H. Lyle, M.D.	Franklin	Gov. T. J. Jarvis	1883 to 1885
W. G. Simmons, Chemist	Wake Forest	Gov. T. J. Jarvis	1883 to 1885
Arthur Winslow, Civil Engineer	Raleigh	Gov. T. J. Jarvis	1884 to 1886
R. H. Lewis, M.D.	Raleigh	State Board of Health	1884 to 1886
Thomas F. Wood, M.D., Secretary	Wilmington	State Society	1885 to 1887
William D. Hilliard, M.D.	Asheville	State Society	1885 to 1891
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1885 to 1891
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1885 to 1887
J. H. Tucker, M.D.	Henderson	Gov. A. M. Scales	1885 to 1887
R. H. Lewis, M.D., Secretary	Raleigh	State Society	1887 to 1888
H. T. Bahnson, M.D., President	Winston	State Society	1887 to 1888
Arthur Winslow, Civil Engineer	Raleigh	Gov. A. M. Scales	1887 to 1889
W. G. Simmons, Chemist	Wake Forest	Gov. A. M. Scales	1887 to 1889
J. H. Tucker, M.D.	Henderson	Gov. A. M. Scales	1888 to 1891
J. L. Ludlow, Civil Engineer	Winston	Gov. A. M. Scales	1888 to 1891
J. H. Tucker, M.D.	Henderson	Gov. D. G. Fowle	1888 to 1891
F. P. Venable, Ph.D. Chemist	Chapel Hill	Gov. D. G. Fowle	1889 to 1893
J. L. Ludlow, Civil Engineer	Winston	Gov. D. G. Fowle	1889 to 1892
J. A. Hodges, M.D.	Fayetteville	State Society	1889 to 1893
J. M. Baker, M.D.	Tarboro	State Society	1891 to 1893
J. H. Tucker, M.D.	Henderson	Gov. T. M. Holt	1891 to 1893
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. T. M. Holt	1891 to 1892
J. L. Ludlow, Civil Engineer	Winston	Gov. T. M. Holt	1892 to 1897
Thomas F. Wood, M.D., Secretary†	Wilmington	State Society	1891 to 1895
George G. Thomas, M.D., President	Wilmington	State Board of Health	1892 to 1895
S. Westray Battle, M.D.	Asheville	State Society	1893 to 1895
W. H. Harrell, M.D.	Williamston	State Society	1893 to 1895
John Whitehead, M.D.	Salisbury	State Board of Health	1893 to 1895
W. H. G. Lucas	White Hall	Gov. Elias Carr	1893 to 1895
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. Elias Carr	1893 to 1895
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1894 to 1897
R. H. Lewis, M.D., Secretary	Raleigh	Gov. Elias Carr	1895 to 1897
W. P. Beall, M.D.	Greensboro	Gov. Elias Carr	1895 to 1897
W. J. Lumsden, M.D.	Elizabeth City	Gov. Elias Carr	1895 to 1897
John Whitehead, M.D.	Salisbury	State Society	1895 to 1897
W. H. Harrell, M.D.	Williamston	State Society	1895 to 1897
W. P. Beall, M.D.	Greensboro	Gov. Elias Carr	1895 to 1897
R. H. Lewis, M.D., Secretary	Raleigh	Gov. Elias Carr	1897 to 1899
F. P. Venable, Ph.D., Chemist	Chapel Hill	Gov. Elias Carr	1897 to 1899
John C. Chase, Civil Engineer	Wilmington	Gov. Elias Carr	1897 to 1899
Charles J. O'Hagan, M.D.	Greenville	Gov. D. L. Russell	1897 to 1899
John D. Spicer, M.D.	Goldsboro	Gov. D. L. Russell	1897 to 1899
J. L. Nicholson, M.D.	Richlands	Gov. D. L. Russell	1899 to 1901
R. H. Lewis, M.D., Secretary	Raleigh	Gov. D. L. Russell	1899 to 1901
A. W. Shaffer, Civil Engineer	Raleigh	Gov. D. L. Russell	1899 to 1901
Charles J. O'Hagan, M.D.	Greenville	Gov. D. L. Russell	1899 to 1901
J. L. Nicholson, M.D.	Richlands	Gov. D. L. Russell	1899 to 1901
Albert Anderson, M.D.	Wilson	Gov. D. L. Russell	1899 to 1901
George G. Thomas, M.D., President	Wilmington	State Society	1899 to 1901

† Died in 1892, leaving a five-year unexpired term, which was filled by the Board

ROSTER OF MEMBERS OF NORTH CAROLINA STATE BOARD OF HEALTH

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FROM ORGANIZATION IN 1877 TO 1970 (cont'd)

Name	Address	Appointed by	Term
S. Westray Battle, M.D.	Asheville	State Society	1899 to 1901
H. W. Lewis, M.D.	Jackson	State Society	1899 to 1901
H. H. Dodson, M.D.	Milton	State Society	1901 to 1907
R. H. Lewis, M.D., Secretary	Raleigh	Gov. C. B. Aycock	1901 to 1907
W. P. Ivey, M.D.	Lenoir	Gov. C. B. Aycock	1901 to 1907
George G. Thomas, M.D., President	Wilmington	Gov. C. B. Aycock	1901 to 1905
Francis Duffy, M.D.	New Bern	Gov. C. B. Aycock	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1901 to 1905
S. Westray Battle, M.D.	Asheville	State Society	1901 to 1907
H. W. Lewis, M.D.	Jackson	State Society	1901 to 1907
W. H. Whitehead, M.D.	Rocky Mount	State Society	1901 to 1905
J. L. Nicholson, M.D.	Richlands	State Society	1901 to 1905
J. L. Ludlow, Civil Engineer	Winston	Gov. C. B. Aycock	1903 to 1909
J. Howell Way, M.D.	Waynesville	Gov. R. B. Glenn	1905 to 1911
W. O. Spencer, M.D.	Winston	Gov. R. B. Glenn	1905 to 1911
George G. Thomas, M.D., President	Wilmington	State Society	1905 to 1911
Thomas E. Anderson, M.D.	Statesville	State Society	1907 to 1913
R. H. Lewis, M.D.	Raleigh	Gov. R. B. Glenn	1907 to 1913
E. C. Register, M.D.	Charlotte	Gov. R. B. Glenn	1907 to 1909
David T. Tayloe, M.D.	Washington	State Society	1907 to 1913
James A. Burroughs, M.D. ¹	Asheville	State Society	1909 to 1913
J. E. Ashcraft, M.D.	Monroe	State Board of Health	1909 to 1913
J. L. Ludlow, Civil Engineer	Winston-Salem	Gov. W. W. Kitchin	1911 to 1917
J. Howell Way, M.D., President	Waynesville	Gov. W. W. Kitchin	1911 to 1917
W. O. Spencer, M.D.	Winston-Salem	Gov. W. W. Kitchin	1911 to 1917
Thomas E. Anderson, M.D.	Statesville	State Society	1911 to 1917
Charles O'H. Laughinghouse, M.D.	Greenville	State Society	1913 to 1919
R. H. Lewis, M.D.	Raleigh	Gov. Locke Craig	1913 to 1919
Edw. J. Wood, M.D.	Wilmington	Gov. Locke Craig	1913 to 1915
A. A. Kent, M.D. ²	Lenoir	State Society	1913 to 1919
Cyrus Thompson, M.D.	Jacksonville	State Society	1913 to 1919
Fletcher R. Harris, M.D.	Henderson	State Board of Health	1915 to 1921
J. L. Ludlow, Civil Engineer	Winston-Salem	Gov. Locke Craig	1917 to 1923
J. Howell Way, M.D., President	Waynesville	Gov. T. W. Bickett	1917 to 1923
E. C. Register, M.D. ¹	Charlotte	Gov. T. W. Bickett	1917 to 1923
Thomas E. Anderson, M.D.	Statesville	State Society	1917 to 1923
Charles O'H. Laughinghouse, M.D.	Greenville	State Society	1919 to 1923
Fletcher R. Harris, M.D. ³	Henderson	State Society	1919 to 1923
A. J. Crowell, M.D.	Charlotte	Gov. T. W. Bickett	1921 to 1923
Chas. E. Waddell, C. E. ⁴	Asheville	Gov. C. Morrison	1919 to 1925
Cyrus Thompson, M.D.	Jacksonville	State Society	1919 to 1925
R. H. Lewis, M.D.	Raleigh	Gov. T. W. Bickett	1923 to 1925
E. J. Tucker, D.D.S.	Roxboro	Gov. T. W. Bickett	1923 to 1929
J. Howell Way, M.D., President	Waynesville	Gov. C. Morrison	1923 to 1929
A. J. Crowell, M.D.	Charlotte	Gov. C. Morrison	1923 to 1927
James P. Stowe, Ph.G.	Charlotte	Gov. C. Morrison	1923 to 1925
D. A. Stanton, M.D.	High Point	State Board of Health	1923 to 1929
Thomas E. Anderson, M.D.	Statesville	State Society	1923 to 1926
Charles O'H. Laughinghouse, M.D. ⁵	Greenville	State Society	1925 to 1931
Cyrus Thompson, M.D. ¹	Jacksonville	State Society	1925 to 1931
D. A. Stanton, M.D.	High Point	State Society	1925 to 1931
R. H. Lewis, M.D. ¹	Raleigh	Gov. A. W. McLean	1926 to 1931
Jno. B. Wright, M.D. ⁶	Raleigh	Gov. A. W. McLean	1925 to 1931
E. J. Tucker, D.D.S. ⁶	Roxboro	Gov. A. W. McLean	1926 to 1927
W. S. Rankin, M.D. ⁴	Charlotte	State Board of Health	1927 to 1929
L. E. McDaniel, M.D.	Jackson	State Board of Health	1927 to 1929
Chas. C. Orr, M.D.	Asheville	Gov. A. W. McLean	1929 to 1935
Thomas E. Anderson, M.D. ⁶	Statesville	State Society	1929 to 1935
L. E. McDaniel, M.D. ⁶	Jackson	State Society	1927 to 1933
James P. Stowe, Ph.G. ⁶	Charlotte	Gov. A. W. McLean	1929 to 1935
A. J. Crowell, M.D. ⁶	Charlotte	Gov. O. Max Gardner	1930 to 1931
J. M. Parrott, M.D. ⁶	Kinston	State Board of Health	1929 to 1935
Chas. C. Orr, M.D. ⁶	Asheville	Gov. O. Max Gardner	1931 to 1935
J. M. Parrott, M.D. ⁵	Kinston	State Society	1931 to 1935
C. V. Reynolds, M.D.	Asheville	State Society	1931 to 1933
L. B. Evans, M.D.	Windsor	State Society	1931 to 1933
S. D. Craig, M.D.	Winston-Salem	State Society	1931 to 1933
John T. Burrus, M.D.	High Point	Gov. O. Max Gardner	1931 to 1933
J. N. Johnson, D.D.S.	Goldsboro	Gov. O. Max Gardner	1931 to 1933
J. A. Goode, Ph.G.	Asheville	Gov. O. Max Gardner	1931 to 1933
H. L. Large, M.D.	Rocky Mount	Gov. O. Max Gardner	1931 to 1935
H. G. Baily, C.E.	Chapel Hill	Gov. O. Max Gardner	1931 to 1935

¹ Died leaving unexpired term.

² Resigned to become member of General Assembly.

³ Resigned to become Health Officer Vance County.

⁴ Reelected.

⁵ Resigned to become Secretary of State Board of Health

⁶ Term terminated on account of the reorganization of the State Board of Health by General Assembly.

**ROSTER OF MEMBERS OF NORTH CAROLINA STATE BOARD OF HEALTH
FROM ORGANIZATION IN 1877 TO 1970 (cont'd)**

<i>Name</i>	<i>Address</i>	<i>Appointed by</i>	<i>Term</i>
Grady G. Dixon, M.D. ⁷	Ayden	Ex. Com. State Society	1931 to 1932
Grady G. Dixon, M.D. ⁸	Ayden	State Society	1932 to 1935
S. D. Craig, M.D.	Winston-Salem	State Society	1933 to 1937
W. T. Rainey, M.D.	Fayetteville	State Society	1933 to 1937
J. N. Johnson, D.D.S.	Goldsboro	Gov. J. C. B. Ehringhaus	1933 to 1937
Hubert B. Haywood, M.D.	Raleigh	Gov. J. C. B. Ehringhaus	1933 to 1937
James P. Stowe, Ph.G.	Charlotte	Gov. J. C. B. Ehringhaus	1933 to 1937
Grady G. Dixon, M.D.	Ayden	State Society	1935 to 1939
J. LaBruce Ward, M.D.	Asheville	State Society	1935 to 1939
H. Lee Large, M.D.	Rocky Mount	Gov. J. C. B. Ehringhaus	1935 to 1939
H. G. Baity, C.E.	Chapel Hill	Gov. J. C. B. Ehringhaus	1935 to 1939
J. N. Johnson, D.D.S.	Goldsboro	Gov. Clyde R. Hoey	1937 to 1941
Hubert B. Haywood, M.D.	Raleigh	Gov. Clyde R. Hoey	1937 to 1941
James P. Stowe, Ph.G.	Charlotte	Gov. Clyde R. Hoey	1937 to 1941
S. D. Craig, M.D.	Winston-Salem	State Society	1937 to 1941
W. T. Rainey, M.D.	Fayetteville	State Society	1937 to 1941
Grady G. Dixon, M.D.	Ayden	State Society	1939 to 1943
J. LaBruce Ward, M.D.	Asheville	State Society	1939 to 1943
H. Lee Large, M.D.	Rocky Mount	Gov. Clyde R. Hoey	1939 to 1943
H. G. Baity, Sc.D.	Chapel Hill	Gov. Clyde R. Hoey	1939 to 1943
C. C. Fordham, Jr., Ph.G. ⁹	Greensboro	Gov. Clyde R. Hoey	1940 to 1943
S. D. Craig, M.D.	Winston-Salem	State Society	1941 to 1945
W. T. Rainey, M.D.	Fayetteville	State Society	1941 to 1945
Hubert B. Haywood, M.D.	Raleigh	Gov. J. Melville Broughton	1941 to 1945
J. N. Johnson, D.D.S.	Goldsboro	Gov. J. Melville Broughton	1941 to 1945
James O. Nolan, M.D.	Kannapolis	Gov. J. Melville Broughton	1941 to 1945
Grady G. Dixon, M.D.	Ayden	State Society	1943 to 1947
J. LaBruce Ward, M.D.	Asheville	State Society	1943 to 1947
H. Lee Large, M.D.	Rocky Mount	Gov. J. Melville Broughton	1943 to 1947
Larry I. Moore, Jr.	Wilson	Gov. J. Melville Broughton	1943 to 1947
S. D. Craig, M.D., Pres.	Winston-Salem	State Society	1945 to 1949
W. T. Rainey, M.D.	Fayetteville	State Society	1945 to 1949
Hubert B. Haywood, M.D.	Raleigh	Gov. R. Gregg Cherry	1945 to 1949
James O. Nolan, M.D.	Kannapolis	Gov. R. Gregg Cherry	1945 to 1949
Paul Jones, D.D.S. ⁹	Farmville	Gov. R. Gregg Cherry	1946 to 1949
Jasper C. Jackson, Ph.G. ¹⁰	Lumberton	Gov. R. Gregg Cherry	1946 to 1947
Grady G. Dixon, M.D., Pres.	Ayden	State Society	1947 to 1951
H. Lee Large, M.D.	Rocky Mount	Gov. R. Gregg Cherry	1947 to 1951
J. LaBruce Ward, M.D.	Asheville	State Society	1947 to 1951
Hubert B. Haywood, M.D.	Raleigh	Gov. W. Kerr Scott	1949 to 1953
Mrs. James B. Hunt	Lucama	Gov. W. Kerr Scott	1949 to 1953
A. C. Current, D.D.S.	Gastonia	Gov. W. Kerr Scott	1949 to 1953
John R. Bender, M.D.	Winston-Salem	State Society	1949 to 1953
Benjamin J. Lawrence, M.D.	Raleigh	State Society	1949 to 1953
G. Grady Dixon, M.D.	Ayden	Medical Society	1951 to 1955
George Curtis Crump, M.D.	Asheville	Medical Society	1951 to 1955
John P. Henderson, Jr., M.D. ¹¹	Sneads Ferry	Gov. Wm. B. Umstead	1954 to 1955
H. C. Lutz, Phg.	Hickory	Gov. W. Kerr Scott	1951 to 1955
Hubert B. Haywood, M.D. ¹²	Raleigh	Gov. Wm. Umstead	1953 to 1957
Mrs. J. E. Latta	Hillsboro	Gov. Wm. Umstead	1953 to 1957
A. C. Current, D.D.S.	Gastonia	Gov. Wm. Umstead	1953 to 1957
John R. Bender, M.D.	Winston-Salem	Medical Society	1953 to 1957
Benjamin J. Lawrence, M.D.	Raleigh	Medical Society	1953 to 1957
G. Grady Dixon, M.D. ¹⁵	Ayden	Medical Society	1955 to 1959
George Curtis Crump, M.D. ¹²	Asheville	Medical Society	1955 to 1959
Roger W. Morrison, M.D. ¹⁴	Asheville	Medical Society	1957 to 1957
John P. Henderson, Jr., M.D.	Sneads Ferry	Gov. Luther H. Hodges	1955 to 1959
H. C. Lutz, Phg.	Hickory	Gov. Luther H. Hodges	1955 to 1959
Lenox D. Baker, M.D. ¹³	Durham	Gov. Luther H. Hodges	1956 to 1957
Earl W. Brain, M.D. ¹⁶	Raleigh	Medical Society	1958 to 1959
Mrs. J. E. Latta	Hillsboro	Gov. Luther H. Hodges	1957 to 1961
Roger W. Morrison, M.D.	Asheville	Medical Society	1957 to 1959
John R. Bender, M. D.	Winston-Salem	Medical Society	1957 to 1961
Z. L. Edwards, D.D.S.	Washington	Gov. Luther H. Hodges	1957 to 1961
Chas. R. Bugg, M.D., Pres. ¹⁷	Raleigh	Medical Society	1957 to 1961
Lenox D. Baker, M.D.	Durham	Gov. Luther H. Hodges	1957 to 1961

⁷ To fill vacancy caused by resignation of Dr. J. M. Parrott.

⁸ To fill vacancy caused by the death of James P. Stowe, Ph.G.

⁹ To fill vacancy caused by resignation of J. N. Johnson, D.D.S.

¹⁰ To fill vacancy caused by resignation of Larry I. Moore, Jr.

¹¹ To fill vacancy caused by the death of Dr. H. Lee Large.

¹² Resigned

¹³ To fill vacancy caused by resignation of Dr. Hubert B. Haywood.

¹⁴ To fill vacancy caused by resignation of Dr. George Curtis Crump

¹⁵ Died leaving unexpired term.

¹⁶ To fill vacancy caused by the death of Dr. G. Grady Dixon.

¹⁷ Died leaving unexpired term.

**ROSTER OF MEMBERS OF NORTH CAROLINA STATE BOARD OF HEALTH
FROM ORGANIZATION IN 1877 TO 1970 (cont'd)**

Name	Address	Appointed by	Term
Ben W. Dawsey, D.V.M.	Gastonia	Gov. Luther H. Hodges	1959 to 1963
Rogert W. Morrison, M.D.	Asheville	Medical Society	1959 to 1963
Jasper C. Jackson, Phg.	Lumberton	Gov. Luther H. Hodges	1959 to 1963
Oscar S. Goodwin, M.D.	Apex	Medical Society	1959 to 1963
*Chas. R. Bugg, M.D., Pres.	Raleigh	Medical Society	1961 to 1965
Lenox D. Baker, M.D.	Durham	Gov. Terry Sanford	1961 to 1965
D. T. Redfern	Wadesboro	Gov. Terry Sanford	1961 to 1965
Glenn L. Hooper, D.D.S.	Dunn	Gov. Terry Sanford	1961 to 1965
John R. Bender, M.D.	Winston-Salem	Medical Society	1961 to 1965
John S. Rhodes, M.D. ¹⁸	Raleigh	Medical Society	1961 to 1965
S. G. Koonce	Chadbourn	Gov. Terry Sanford	1963 to 1967
James S. Raper, M.D.	Asheville	Medical Society	1967 to 1971
Paul F. Maness, M.D.	Burlington	Medical Society	1967 to 1971
Ben W. Dawsey, D.V.M.	Gastonia	Gov. Dan Moore	1967 to 1971
Ernest A. Randleman, Jr., Phg.	Mount Airy	Gov. Dan Moore	1967 to 1971
Joseph S. Hiatt, Jr., M.D.	Southern Pines	Medical Society	1969 to 1973
Jesse H. Meredith, M.D.	Winston-Salem	Medical Society	1969 to 1973
Lenox D. Baker, M.D.	Durham	Gov. Robert W. Scott	1969 to 1973
J. M. Lackey	Hiddenite	Gov. Robert W. Scott	1969 to 1973
Charles Barker, D.D.S.	New Bern	Gov. Robert W. Scott	1969 to 1973

18. To fill vacancy caused by death of Dr. Chas. R. Bugg.

**ROSTER OF MEMBERS OF THE VARIOUS BOARDS OF MEDICAL EXAMINERS OF THE STATE OF
NORTH CAROLINA**

FIRST BOARD

James H. Dickson, Wilmington	1859-1866
Charles E. Johnson, Raleigh	1859-1866
Caleb Winslow, Hertford	1859-1866
Otis F. Manson, Townsville	1859-1866
William H. McKee, Raleigh	1859-1866
Christopher Happoldt, Morganton	1859-1866
J. Graham Tull, New Bern	1859-1866
Samuel T. Iredell, Secretary	1859-1866

THIRD BOARD

Charles J. O'Hagan, Greenville	1872-1878
W. A. B. Norcom, Edenton	1872-1878
C. Tate Murphy, Clinton	1872-1878
George A. Foote, Warrenton	1872-1878
J. W. Jones, Tarboro	1872-1878
R. L. Payne, Lexington	1872-1878
Charles Duffy, Jr., Secretary, New Bern	1872-1878

SECOND BOARD

N. J. Pittman, Tarboro	1866-1872
E. Burke Haywood, Raleigh	1866-1872
R. H. Winborne, Edenton	1866-1872
S. S. Satchwell, Rocky Point	1866-1872
J. J. Summerell, Salisbury	1866-1872
R. B. Haywood, Raleigh	1866-1872
M. Whitehead, Salisbury	1866-1872
J. F. Shaffner, Salem	1866-1872
William Little, Secretary	1866-1872
Thomas F. Wood, Secretary, Wilmington	1867-1872

FOURTH BOARD

Peter E. Hines, Raleigh	1878-1884
Thomas D. Haigh, Fayetteville	1878-1884
George L. Kirby, Goldsboro	1878-1884
Thomas F. Wood, Wilmington	1878-1884
Joseph Graham, Charlotte	1878-1884
Robert I. Hicks, Williamston ¹	1878-1880
Richard H. Lewis, Raleigh ²	1880-1884
Henry T. Bahnson, Secretary, Salem	1878-1884

¹ Resigned before expiration of term.

² Elected for unexpired term of Dr. Hicks.

ROSTER OF MEMBERS OF THE VARIOUS BOARDS OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA (cont'd)

FIFTH BOARD

William R. Wood, Scotland Neck	1884-1890
Augustus W. Knox, Raleigh	1884-1890
Francis Duffy, New Bern	1884-1890
Patrick L. Murphy, Morganton	1884-1890
Willis Alston, Littleton	1884-1890
J. A. Reagan, Weaverville	1884-1890
W. J. H. Bellamy, Secretary, Wilmington	1894-1890

SIXTH AND SEVENTH BOARDS³

R. L. Payne, Jr., Lexington	1890-1892
George W. Purefoy, Asheville	1890-1892
George G. Thomas, Wilmington	1890-1894
Robert S. Young, Concord	1890-1894
William H. Whitehead, Rocky Mount	1890-1896
George W. Long, Graham	1890-1896
L. J. Picot, Secretary, Littleton	1890-1896
Julian M. Baker, Tarboro	1892-1898
H. B. Weaver, Secretary, Asheville	1892-1898
J. M. Hays, Greensboro ⁴	1894-1897
Kemp P. Battle, Jr., Raleigh ⁵	1897-1900
Thomas S. Burbank, Wilmington ¹	1894-1898
Richard S. Whitehead, Chapel Hill ⁴	1896-1898
William H. H. Cobb, Goldsboro ⁶	1898-1900
J. Howell Way, Secretary, Waynesville ⁷	1898-1902
David T. Tayloe, Washington	1896-1902
Thomas E. Anderson, Sec., Statesville	1896-1902
Albert Anderson, Wilson ⁸	1896-1902
Edward C. Register, Charlotte ⁸	1898-1902
Thomas S. McMullan, Hertford ⁸	1900-1902
John C. Walton ⁸	1900-1902

EIGHTH BOARD

A. A. Kent, Lenoir	1902-1908
Charles O'H. Laughinghouse, Greenville	1902-1908
M. H. Fletcher, Asheville	1902-1908
James M. Parrott, Kinston	1902-1908
J. T. J. Battle, Greensboro	1902-1908
Frank H. Russell, Wilmington	1902-1908
George W. Pressly, Secretary, Charlotte ¹	1902-1906
G. T. Sikes, Secretary, Grissom ⁹	1906-1908

NINTH BOARD

Lewis B. McBrayer, Asheville	1908-1914
John C. Rodman, Washington	1908-1914
William W. McKenzie, Salisbury	1908-1914
Henry H. Dodson, Greensboro	1908-1914
John Bynum, Winston-Salem	1908-1914
J. L. Nicholson, Richlands	1908-1914
Benj. K. Hays, Secretary, Oxford	1908-1914

TENTH BOARD

Isaac M. Taylor, Morganton	1914-1920
John Q. Myers, Charlotte	1914-1920
Jacob F. Highsmith, Fayetteville	1914-1920
Martin L. Stevens, Asheville	1914-1920
Charles T. Harper, Wilmington ⁴	1914-1915
Edwin G. Moore, Elm City ¹⁰	1915-1920
John G. Blount, Washington ¹¹	1914-1920
Hubert A. Royster, Secretary, Raleigh	1914-1920

3 In 1890 the Medical Society of the State of North Carolina adopted the plan of electing members of the Board in such a manner that the terms would expire at different intervals of two years. This practice was followed for twelve years, or until 1902, when the plan was abandoned; an equivalent of two terms of six years each. It is evident that the Society arranged to abandon the policy as early as 1898, as two members were elected for short terms, and two years later two other members were elected for still shorter terms. It is therefore impossible to separate the sixth and seventh Boards, since the membership was overlapping.

ELEVENTH BOARD

Lester A. Crowell, Lincolnton	1920-1926
William P. Holt, Duke	1920-1926
J. Gerald Murphy, Wilmington	1920-1926
Lucius N. Glenn, Gastonia	1920-1926
Clarence A. Shore, Raleigh	1920-1926
William M. Jones, Greensboro	1920-1926
Kemp P. B. Bonner, Sec., Morehead City	1920-1926

TWELFTH BOARD

Paul H. Ringer, Asheville	1926-1932
W. Houston Moore, Wilmington	1926-1932
T. W. M. Long, Roanoke Rapids	1926-1932
W. W. Dawson, Grifton ⁴	1926-1930
J. K. Pepper, Winston-Salem	1926-1932
Foy Roberson, Durham	1926-1932
John W. McConnell, Secretary, Davidson	1926-1932
David T. Tayloe, Jr., Washington ¹²	1930-1932

THIRTEENTH BOARD

Ben F. Royal, Morehead City	1932-1938
Benj. J. Lawrence, Secretary, Raleigh	1932-1938
F. Webb Griffith, Asheville	1932-1938
Hamilton W. McKay, Charlotte	1932-1938
J. W. Vernon, Morganton	1932-1938
W. H. Smith, Goldsboro	1932-1938
K. G. Averitt, Cedar Creek ⁴	1932-1936
Roscoe D. McMillan, Red Springs ¹³	1936-1938

FOURTEENTH BOARD

Karl B. Pace, Greenville	1938-1944
William M. Coppridge, Durham	1938-1944
Frank A. Sharpe, Greensboro	1938-1944
Lewis W. Elias, Asheville ⁴	1938-1943
J. Street Brewer, Roseboro	1938-1944
W. D. James, Secretary, Hamlet	1938-1944
L. A. Crowell, Jr., Lincolnton	1938-1944
John LaBruce Ward, Asheville ¹⁴	1943-1944

FIFTEENTH BOARD

C. W. Armstrong, Salisbury	1944-1950
Paul G. Parker, Erwin	1944-1950
M. D. Bonner, Jamestown	1944-1950
T. Leslie Lee, Kinston	1944-1950
Roy B. McKnight, Charlotte	1944-1950
M. A. Pittman, Wilson	1944-1950
Ivan M. Proctor, Secretary, Raleigh	1944-1950
James B. Bullitt, Chapel Hill ¹⁵	1949-1950
Paul F. Whitaker, Kinston ¹⁶	1950

4 Died before the expiration of his term.

5 Elected to serve unexpired term of Dr. Hays.

6 Elected to serve the unexpired term of Dr. Burbank.

7 Elected to serve the unexpired term of Dr. Whitehead.

8 Elected for short term expiring in 1902.

9 Elected to serve the unexpired term of Dr. Pressly.

10 Elected to serve the unexpired term of Dr. Harper.

11 Died a few months before the expiration of his term; such a short time that the vacancy was not filled.

12 Elected to serve unexpired term of Dr. W. W. Dawson.

13 Elected to serve unexpired term of Dr. Averitt.

14 Elected to serve the unexpired term of Dr. Elias.

15 Elected to serve unexpired term of Dr. T. Leslie Lee.

16 Elected to serve unexpired term of Dr. Paul G. Parker.

17 Elected to serve unexpired term of Dr. James P. Rousseau.

ROSTER OF MEMBERS OF THE VARIOUS BOARDS OF MEDICAL EXAMINERS OF THE STATE OF NORTH CAROLINA (cont'd)

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SIXTEENTH BOARD

Amos N. Johnson, Garland	1950-1956
Heyward C. Thompson, Shelby	1950-1956
James P. Rousseau, Winston-Salem	1950-1956
Newsom P. Battle, Rocky Mount	1950-1956
Clyde R. Hedrick, Lenoir	1950-1956
L. Randolph Doffermyre, Dunn	1950-1956
G. Westbrook Murphy, Asheville ¹⁷	1955
Joseph J. Combs, Secretary, Raleigh	1950-1956

SEVENTEENTH BOARD

Carl Vann Tyner, M.D., Leaksville	1956-1962
Joseph John Combs, M.D., Raleigh	1956-1962
John Bascom Anderson, M.D., Asheville	1956-1962
Thomas Williams Baker, M.D., Charlotte	1956-1962
Edwin Albert Rasberry, Jr., M.D., Wilson	1956-1962
Thomas G. Thurston, M.D., Salisbury	1956-1962
Luther Randolph Doffermyre, M.D., Dunn	1956-1962

EIGHTEENTH BOARD¹⁸

Frank Edmondson, Jr., Asheboro, Pres.	1962-1964
Re-elected (6-yr. term)	1964-1970
Ralph G. Templeton, Lenoir ¹⁹	1962-1964
Re-elected (6-yr. term)	1964-1970
Joseph John Combs, Secretary, Raleigh	1962-1964
Re-elected (6-yr. term)	1966-1972
H. Lee Large, Jr., Charlotte	1962-1966
Re-elected (6-yr. term)	1966-1972
Jamse E. Davis, Durham	1962-1968
W. Boyd Owen, Waynesville	1962-1968
Clark Rodman, Washington	1962-1968
Vernon W. Taylor, Jr., M.D., Elkin ²⁰	1966-1970

NINETEENTH BOARD

Clark Rodman, Washington, President	1962-1968
Joseph J. Combs, Raleigh, Secretary	1966-1972
James E. Davis, Durham	1962-1968
Frank Edmondson, Jr., Asheboro	1964-1970
H. Lee Large, Jr., Charlotte	1966-1972
W. Boyd Owen, Waynesville	1962-1968
Vernon W. Taylor, Jr., Elkin	1966-1970

18 In 1962 the Medical Society of the State of North Carolina adopted a plan for election members of the Board in such a manner that some of the terms would expire at intervals of two years, hence the varying terms of the first-selected board members.

19 Died before expiration of term.

20 Elected to serve unexpired term of Dr. Ralph P. Templeton.

TWENTIETH BOARD

James E. Davis, Durham, President	1962-1968
Joseph J. Combs, Raleigh, Secretary	1966-1972
Frank Edmondson, Jr., Asheboro	1964-1970
H. Lee Large, Jr., Charlotte	1966-1972
W. Boyd Owen, Waynesville	1962-1968
Vernon W. Taylor, Jr., Elkin	1966-1970
Clark Rodman, Washington	1962-1968

TWENTY-FIRST BOARD

W. Boyd Owen, Waynesville, President	1962-1968
Joseph J. Combs, Raleigh, Secretary	1966-1972
H. Lee Large, Jr., Charlotte	1966-1972
Vernon W. Taylor, Jr., Elkin	1966-1970
James E. Davis, M.D., Durham	1962-1968
Frank Edmondson, Jr., Asheboro	1964-1970
Clark Rodman, Washington	1962-1968

TWENTY-SECOND BOARD

Frank Edmondson Jr., Asheboro, President	1964-1970
Joseph J. Combs, Raleigh, Secretary	1966-1972
Bryant L. Galusha, Charlotte	1968-1974
Joseph W. Hooper, Jr., Wilmington	1968-1974
H. Lee Large, Jr., Charlotte	1966-1972
Cornelius T. Partrick, Washington	1968-1974
Vernon W. Taylor, Jr., Elkin	1964-1970

TWENTY-THIRD BOARD

Vernon W. Taylor, Jr., Elkin, President	1964-1970
Joseph J. Combs, Raleigh, Secretary	1966-1972
Bryant L. Galusha, Charlotte	1968-1974
Frank Edmondson, Jr., Asheboro	1964-1970
Joseph W. Hooper, Jr., Wilmington	1968-1974
H. Lee Large, Jr., Charlotte	1966-1972
Cornelius T. Partrick, Washington	1968-1974

TWENTY-FOURTH BOARD

H. Lee Large, Jr., Charlotte, President	1966-1972
Joseph John Combs, Raleigh, Secretary	1966-1972
Bryant L. Galusha, Charlotte	1968-1974
Frank Edmondson, Jr., Asheboro	1970-1976
Joseph W. Hooper, Jr., Wilmington	1968-1974
Cornelius T. Partrick, Washington	1968-1974
William H. Sprunt, III, Raleigh	1970-1976

MEDICAL AWARDS

MOORE COUNTY MEDICAL SOCIETY MEDAL

In 1927 the Moore County Medical Society established a fund, the interest from which is used to pay for a medal to be given for the best paper read at the State Society meeting each year. No one is eligible to receive this medal except Fellows of the Medical Society of the State of North Carolina in good standing; no invited guest is allowed to compete.

Each Section Chairman selected a committee of three to decide on the best paper written in their section. The winning papers are then turned over to the State Committee, who select the one to receive the medal. The following Fellows have been awarded this medal:

- 1928—Paul Pressly McCain, M.D. Sanatorium
"The Diagnosis and Significance of Juvenile Tuberculosis"
(From the Section on Pediatrics)
- 1929—A. B. Holmes, M.D. Fairmont
"The Treatment of Uremia"
(From the Section on Chemistry, Materia Medica and Therapeutics)
- 1930—C. T. Smith, M.D., and W. Bernard Kinlaw, M.D. Rocky Mount
"The Clinical Consideration of Anemia of Pregnancy and of Puerperium"
(From Section on Practice of Medicine)
- 1931—F. C. Smith, M.D. Charlotte
"Practical Value of Perimetry in Intracranial Conditions; Case Reports" (tumors, vascular disease, toxemia, syphilis and trauma)
(From Section on Eye, Ear, Nose and Throat)
- 1932—Charles I. Allen, M.D. Wadesboro
"An Improved Splint for Treating Fractures of the Lower Extremity Showing Reduction and Skeletal Distraction Attachments"
(From Section on Surgery)
- 1933—H. L. Sloan, M.D. Charlotte
"Some General Remarks about Cataract Surgery, With Report of 100 Consecutive Uncomplicated Cataract Operations"
(From Section on Ophthalmology and Otolaryngology)
- J. R. Adams, M.D. Charlotte
"Hypo-glycaemia in Children"
(From Section on Pediatrics)
- 1934—Fred E. Motley, M.D. Charlotte
"Complications of Mastoiditis with Special Reference to Septicemia"
(From Section on Ophthalmology and Otolaryngology)
- 1935—Arthur H. London, M.D. Durham
"The Composition of an Average Pediatrics Practice"
(From Section on Pediatrics)
- 1936—V. K. Hart, M.D. Charlotte
"Etiological and Therapeutic Aspects of Bronchiectasis with Clinical Observations on Bronchial Lavage by the Stitt Method"
(From Section on Ophthalmology and Otolaryngology)
- 1937—No award made.
- 1938—O. Hunter Jones, M.D. Charlotte
"Pelvic Architecture and Classification with its Practical Application"
(From Section on Gynecology and Obstetrics)
- 1939—Donnell B. Cobb, M.D. Goldsboro
"Vaginal Uterolithotomy"
(From Section on Surgery)
- 1940—C. R. Monroe, M.D., C. D. Thomas, M.D., and C. L. Gray, M.D. Pinehurst
"Thoracoplasty and Apicolysis"
(From Section on Surgery)
- 1941—Walter R. Johnson, M.D. Asheville
"Is Diverticulitis of the Colon a Surgical Disease?"
(From Section on Practice of Medicine)
- 1942—E. P. Alyea, M.D. Durham
"Castration for Carcinoma of the Prostate Gland"
(From Section on Surgery)
- 1943—No award made.
- 1944—D. F. Milam, M.D. Chapel Hill
"Vitamin C Content of Some North Carolina Cooked Foods"
(From Section on Public Health and Education)
- 1945—No Meeting.
- 1946—E. C. Hamblen, M.D. Durham
"Some Aspects of Sex Endocrinology in General Practice"
(From Section on General Practice of Medicine and Surgery)
- 1947—W. L. Thomas, M.D. Durham
"Some Psychosomatic Problems in Gynecology"
(From Section on Gynecology and Obstetrics)
- 1948—Felda Hightower, M.D. Winston-Salem
"The Control of Electrolyte and Water Balance in Surgical Patients"
(From Section on Surgery)
- 1949—George J. Baylin, M.D. Durham
"The Roentgen Aspect of Non-Opaque Pulmonary Foreign Bodies"
(From Section on Radiology)
- 1950—Parker R. Beamer, M.D. Winston-Salem
"Studies on Experimental Leptospirosis"
(From Section on Pathology)
- 1951—John P. U. McLeod, M.D. Marshville
"A Simplified Modification for Staining of the Vaginal Smear for Immediate Appraisal of Endocrine Activity"
(From Section on Gynecology and Obstetrics)
- 1952—Samuel F. Ravenel, M.D. Greensboro
"Humidification in Pediatrics"
(From Section on Pediatrics)
- 1953—Harrie R. Chamberlin, M.D. Chapel Hill
"Diagnosis and Management of Poisoning Due to Organic Phosphate Insecticides"
(From Section on Pediatrics)
- 1954—Paul Kimmelstiel, M.D. Charlotte
Roland T. Pixley, M.D. Charlotte
John Crawford, M.D. Charlotte
"Statistical Review of Twenty-two Thousand Cases Examined by Cervical Smears"
(From Section on Pathology)
- 1955—H. Hugh Bryan, M.D. Chapel Hill
"Obesity and the Public Health"
(From Section on Public Health)
- 1956—Wm. M. Peck, M.D. McCain
"The Changing Pattern of Tuberculosis"
(Section PH&E)
- 1957—John R. Ashe, Jr., M.D. Concord
John V. Arey, M.D. Concord
"The Use of Diamox in Obstetrics and Gynecology"
(From Section on Obstetrics and Gynecology)
- 1958—John O. Lafferty, M.D.
"Peptic Ulcers in Children"
(From Section on Radiology)
- 1959—Robert E. Coker, Jr., M.D. Chapel Hill
"The Medical Student and Specialization"
(From Section on Public Health & Education)
- 1960—William J. A. DeMaria, M.D. Durham
"Management of Childhood Nephrosis"
(From Section on Pediatrics)
- 1961—William W. Shingleton, M.D. Durham
"Some Recent Clinical and Experimental Advances Relative to Diseases of the Biliary Tracts and Pancreas"
(From Section on Surgery)
- 1962—Frank C. Greiss, Jr., M.D. Winston-Salem
"Inevitable, Incomplete and Septic Abortions"
(From Section on Obstetrics & Gynecology)
- 1963—No Awards.

- 1964—Christopher Columbus Fordham, III, M.D. Chapel Hill
 "Problems in the Diagnosis of Renal Parenchyma Disease"
 (From Section on General Practice of Medicine)
- 1965—Archie Lipe Barringer, M.D. . . . Mount Pleasant
 "CHRONIC URETHRITIS IN THE FEMALE"
 (From Section on General Practice of Medicine)
- 1966—Stewart M. Scott, M.D. Oteen
 "FEMORO-POPLITEAL ARTERIAL OBSTRUCTION"
 (From Section on Surgery)
- 1967—M. Carlyle Crenshaw, Jr., M.D. Durham
 "PREMATURE SEPARATION OF THE NORMALLY IMPLANTED PLACENTA"
 (From Section on Obstetrics & Gynecology)
- 1968—No Award.
- 1969—Richard A. Kemp, M.D. Winston-Salem
 "A REVIEW OF POSSIBLE MECHANISMS OF HALOTHANE TOXICITY"
 (From Section on Anesthesiology)
-
- THE GEORGE MARION COOPER AWARD**
- The Fellows of the Wake County Medical Society present this George Marion Cooper Award established in honor of George Marion Cooper, physician and health benefactor.
- This medal is awarded by the Fellows of the Wake County Medical Society as a token of appreciation and esteem in recognition of the eminence of an essay contributing to the knowledge and advancement of the science of medicine in the field of Preventive Medicine, Public Health, or Maternal and Infant Health Care, presented before the Medical Society of the State of North Carolina. The following Fellows have been awarded this medal:
- 1951—Donald L. Whitener, M.D. Winston-Salem
 "The Management of Labor and Delivery in the Interest of the Premature Infant"
 (From Section on Gynecology and Obstetrics)
- 1952—Ronald Stephen, M.D., Senior Author;
 Duke University Durham
 "The Evaluation of Methods of Pain Relief During Labor and Delivery with Reference to Mother and Child"
 (From Section on Gynecology and Obstetrics)
- 1953—Ernest Craige, M.D. Chapel Hill
 "The Prevention of Recurrences of Rheumatic Fever"
 (From the Section on Practice of Medicine)
- 1954—Richard L. Pearse, M.D. Durham
 Eleanor Easley, M.D. Durham
 Kenneth Podger, M.D. Durham
 "Obstetric Analgesia and Anesthesia"
 (From Section on Obstetrics and Gynecology)
- 1955—Dirk Verhaeff, M.D. Huntersville
 William M. Peck, M.D. McCain
 "The Trends in Management of Tuberculosis in Children"
 (From Section on Pediatrics)
- 1956—Benjamin A. Johnson, M.D. Durham
 Susan C. Dees, M.D. Durham
 "Immunization of Allergic Children with Particular Reference to Eczema Vaccinatum"
 (From Section on Pediatrics)
- 1957—Walter A. Sikes, M.D. Raleigh
 John D. Patton, M.D. Asheville
 Robert L. Craig, M.D. Asheville
 Marie Baldwin, M.D. Asheville
 Anne Sagberg, M.D. Asheville
 R. Charman Carroll, M.D. Asheville
 "Trends in the Development of an Open Psychiatric Hospital"
 (From Section on Neurology on Psychiatry)
- 1958—Madison S. Spach, M.D.
 Jerome S. Harris, M.D.
 "Congenital Heart Disease in Infancy"
 (From Section on Pediatrics)
- 1959—Roy T. Parker, M.D. Durham
 Harry W. Johnson, M.D. Durham
 F. Bavard Carter, M.D. Durham
 "Obstetric Shock"
 (From Section on General Practice of Medicine)
- 1960—Courtney D. Egerton, M.D. Raleigh
 Robert J. Ruark, M.D. Raleigh
 "Continuous Caudal Analgesia in Private Practice"
 (From Section on Obstetrics & Gynecology)
- 1961—Kenneth D. Hall, M.D. Durham
 "Post-Anesthetic Care of the Geriatric Patient"
 (From Section on Anesthesiology)
- 1962—Jesse P. Chapman, Jr., M.D. Asheville
 "Thoracic Trauma and Its Treatment"
 (From Section on Orthopaedics and Traumatology)
- 1963—No Awards.
- 1964—Robert Stevenson Lackey, M.D. Charlotte
 "Special Procedures in a Community Hospital"
 (From Section on Radiology)
- 1965—No Awards.
- 1966—No Award.
- 1967—Robert Griffin Brame, M.D. Winston-Salem
 "Septic Abortion"
 (From Section on Obstetrics & Gynecology)
- 1968—No Award.
- 1969—Arthur C. Christakos, M.D. Durham
 "Practical Cyto-Genetics"
 (From Section on Pediatrics & Section on Obstetrics & Gynecology combined)

GASTON COUNTY MEDICAL SOCIETY AWARD

By authority of the House of Delegates an award is established by the Gaston County Medical Society for the best presentation of audio-visual material in scientific treatise and will be awarded to the best presentation annually at the Annual Session of the State Society. Competition will be restricted to audio-visual material as provided by the rules. Program Chairmen of the eleven scientific sections should take note of this in the preparation of the 1956 program and in judging of presentations at the Annual Session in 1956. The following Fellows have been awarded this medal.

- 1952—Kenneth L. Pickrell, M.D. Durham
 "Tattooing the Cornea"
 (From Scientific Exhibits)
- 1953—Joseph E. Markee, M.D. Durham
 "Autonomic Nervous System"
 (Film from Audio-Visual Postgraduate Instructional Program)
- 1954—William H. Boyce, M.D. Winston-Salem
 Fred K. Garvey, M.D. Winston-Salem
 Charles M. Norfleet, M.D. Winston-Salem
 "Biocolloids of Urine in Health and in Calculous Disease"
 (From Scientific Exhibits)
- 1955—Caleb Young, M.D. Winston-Salem
 "Congenital Dislocation of the Hip"
 (A motion picture)
 (From Postgraduate Audio-Visual Program)
- 1956—C. R. Stephen, M.D. Durham
 R. C. Martin, M.D. Durham
 Bourgeois-Gavardin. Durham
 "Prophylaxis of Non-Hemolytic Transfusion Reactions: Value of Pyribenzamine"
 (From Section on Anesthesia)
- 1957—J. Leonard Goldner, M.D. Durham
 Mr. Bert Titus Durham
 "The Juvenile Amputee-Upper Extremity"
 (From Section on General Practice of Medicine)
- 1958—T. Franklin Williams, M.D.
 J. L. DeWalt, M.D.
 R. W. Winter, M.D.
 Charles H. Burnett, M.D.
 "Newer Diagnostic Criteria in Hyperparathyroidism"
 (From 1958 Scientific Exhibits)
- 1959—Albert G. Smith, M.D. Durham
 "Automation in the Clinical Chemistry Laboratory"
- 1960—Paul W. Sanger, M.D. Charlotte
 "Surgical Management of Deformities of the Anterior Chest"
 (From 1960 Scientific Exhibits)
- 1961—Robert Page Morehead, M.D. Winston-Salem
 "Tumor Formation"
 (1961 Scientific Exhibits)
- 1962—Paul W. Sanger, M.D. Charlotte
 "Closure of Ventricular Septal Effects—Presentation of New Methods"
 (1962 Scientific Exhibits)
- 1963—No Awards.
- 1964—Joseph William Eades, M.D. Greensboro
 Hilliard Foster Seigler, M.D. Greensboro
 "Hand Rehabilitation Center"
 (1964 Scientific Exhibits)
- 1965—Carl N. Patterson, M.D. Durham
 "PHYSIOLOGIC SEPTOPLASTY AND RHINOPLASTY"
 (From Section on Ophthalmology & Otolaryngology)
- 1966—No Award.
- 1967—Vernon Hinson Youngblood, M.D., and Edwin Merrill Tomlin, M.D. Concord
 "AN ORAL ANTI-INFLAMMATORY AGENT FOR URETERAL CALCULI"
 (1967 Scientific Exhibits)
- 1968—No Award.
- 1969—Sylvester Vala, M.D. Raleigh
 "Experience In Multiphasic Screening in North Carolina"
 (From Section on Public Health and Education)

STATUS OF SOCIETY MEMBERSHIP BY COUNTIES FOR YEARS 1956- 1970

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COUNTY	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Alamance-Caswell	62	63	65	66	66	67	70	70	72	71	76	72	73	77	79
Alexander 1								7	6	5		4	4	4	4
Alleghany 2						4	11	4	4	6	6				
Anson	10	10	8	8	10		8	8	9	6	7	7	7	7	7
Ashe 3	11	8	8	9	13	8		8	8	8	6				
Ashe-Alleghany												12	12	12	11
Ashe-Watauga															
Avery 4	8	9	9	9	11	10	10	13	11	11	12	10	9	12	10
Beaufort	16	17	20	19	18	19	37	20	22	21	21				
Beaufort-Hyde-Martin- Washington-Tyrrell												38	38	38	36
Bertie	10	10	10	10	10	10	8	8	9	8	8	7	8	8	7
Bladen	11	11	12	11	12	10	10	10	10	10	9	9	8	8	7
Brunswick									5	5	5				
Buncombe	174	175	175	170	170	172	175	174	179	189	183	179	181	184	191
Burke	38	35	36	34	34	35	36	36	40	43	43	41	41	41	41
Cabarrus	52	59	59	58	62	60	61	58	59	57	63	61	59	61	61
Caldwell	26	28	27	26	27	29	31	32	34	34	31	28	26	28	26
Camden 5									1	1					
Carteret	16	17	18	19	20	20	20	19	21	21	21	22	20	20	24
Caswell 6									1	1					
Catawba	46	47	49	51	52	53	58	61	64	65	65	65	74	68	77
Chatham	11	11	12	13	13	15	13	14	12	9	10	9	9	9	7
Cherokee	10	11	11	10	10	11	10	11	11	10	11	11	11	10	10
Chowan-Perquimans	12	12	10	11	10	9	11	11	10	10		8	9	9	8
Clay 7															
Cleveland	44	47	45	45	46	43	44	49	48	49	49	53	52	53	50
Columbus	19	23	22	24	23	21	20	22	22	21	20	19	19	19	19
Craven	25	24	27	27	26	28	28	31	31	31	35				
Craven-Pamlico												36	35	36	37
Cumberland	51	50	56	58	58	59	59	60	58	60	64	63	66	65	70
Currituck 8									2	2					
Dare 5									2	2					
Davidson	35	35	40	43	41	40	38	38	38	38	36	36	37	37	39
Davie 9									6	7					
Duplin	16	18	15	15	15	13	13	14	13	16	17	15	15	15	14
Durham-Orange	285	300	313	314	325	344	355	360	378	478	400	395	397	420	417
Edgecombe-Nash	62	67	66	65	61	65	69	66	68	70	70	70	69	72	70
Forsyth	203	213	221	221	220	222	221	234	236	247	240	253	258	254	253
Franklin	10	10	10	12	10	10	13	11	12	10	11	12	11	11	10
Gaston	70	69	70	70	72	73	73	74	77	80	78	79	76	67	74
Gates	3	3	3	3	3	2	2	2	1	1	1	1	1	1	1
Graham										1	1				
Granville	19	21	25	26	27	29	28	25	28	29	32	28	23	24	24
Greene	3	3	3			2		2	2	2	2				
Guilford	215	214	214	220	221	232	240	242	253	258	263	267	270	267	264
Halifax	31	32	32	33	32	29	28	25	27	27	27	26	26	25	23
Harnett	19	19	19	19	21	22	23	24	25	23	23	20	19	19	19
Haywood	26	26	31	33	35	34	33	31	32	32	29	32	31	31	29
Henderson	32	34	34	36	34	34	31	32	32	31	30	33	32	35	33
Hertford	17	14	15	16	16	17	16	16	16	15	15	16	15	15	14
Hoke	12	14	12	12	12	13	14	13	14	13	12	13	13	14	14
Hyde						1		1	1	1	1				
Iredell-Alexander	47	48	48	47	47	47	52	47	49	56	55				
Iredell												51	51	53	56
Jackson 10								11	13	13	13	12	14	14	13
Jackson-Swain	15	16	16	15	16	15	12								
Johnston	39	36	35	36	32	30	32	33	31	35	34	32	32	32	30
Jones	1	2	1			1	1	2	2	2	2				
Lee	16	16	16	17	16	17	19	20	20	21	22	24	23	23	22
Lenoir	41	40	42	47	49	50	49	50	51	50	48				
Lenoir-Green-Jones												48	47	47	43
Lincoln	10	13	12	12	13	12	12	13	14	14	14	13	13	13	12
Macon-Clay	9	12	11	10	11	11	9	9	10	10	8	8	6	6	5

STATUS OF MEMBERSHIP BY COUNTIES—Continued

	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Madison	6	7	7	7	10	8	6	6	6	6	6	6	6	6	6
Martin 11															
Martin-Washington-Tyrrell	16	16	17	17	16	15		16	8	16	16				
McDowell	12	12	12	11	11	11	11	11	11	10	11	11	11	11	11
Mecklenburg	270	271	284	289	290	310	314	320	333	348	345	351	353	363	371
Mitchell 12															
Mitchell-Avery 13															
Mitchell-Watauga 14															
Mitchell-Yancey	9	9	9	10	13	11	12	10	11	11	11	11	12	12	10
Montgomery 15	10	11	8	7	7	8	8	7	7	7	7	7	7	7	7
Moore	34	32	31	32	32	31	32	37	35	36	37	39	40	39	39
Nash 16															
New Hanover	73	76	77	76	80	80	79	81	74	73	75	79	94	90	100
Northampton	3	4	4	4	4	3	3	3	3	4	4	5	5	5	5
Onslow	12	13	12	12	14	15	18	16	13	15	13	15	14	14	21
Orange 17															
Pamlico	5	4	4	4	4	3	3	1	2	1	1				
Pasquotank-Camden- Currituck-Dare	28	29	28	26	26	28	28	27	22	27	26	29	32	32	31
Pasquotank-Camden- Dare 8															
Pender									4	4	4				
Perquimans 18															
Person	10	10	10	10	11	12	12	11	11	11	10	10	10	10	10
Pitt	46	44	41	43	41	42	44	43	46	46	48	55	60	62	64
Polk	10	11	10	11	11	12	13	13	16	15	17	17	17	17	16
Randolph	28	28	26	28	27	28	31	29	31	31	31	31	30	31	33
Richmond	20	19	20	22	22	25	23	22	21	22	22	22	21	21	20
Robeson	45	43	46	49	48	49	47	50	50	50	50	48	48	47	46
Rockingham	36	37	34	35	39	40	39	40	39	38	38	39	41	41	42
Rowan-Davie	63	60	62	63	63	63	67	53	60	63	62	62	64	64	63
Rutherford	26	27	25	27	25	25	24	25	25	26	25	24	24	24	25
Sampson	29	19	19	17	17	17	19	19	19	19	18	18	18	18	19
Scotland	14	13	13	16	14	17	19	17	17	18	19	19	22	22	24
Stanly 15	29	29	27	27	28	27	27	25	27	25	21	25	26	26	27
Stanly-Montgomery															
Stokes								3	5	5	5				
Surry 19															
Surry-Yadkin	30	35	38	38	37	39	30	42	38	39	39	36	33	34	34
Swain 10							4	5	5	5	4	4	4	4	4
Transylvania	9	11	11	12	13	12	13	14	13	15	14	12	13	12	12
Tyrrell 20															
Union	16	17	16	15	15	16	19	19	19	17	19	19	19	18	18
Vance	17	16	14	16	15	15	15	17	15	15	14	14	13	13	12
Wake	155	156	158	159	165	172	182	188	189	192	200	209	216	227	241
Warren	9	8	8	7	8	8	7	6	6	4	5	5	4	4	4
Washington-Tyrrell 11															
Watauga	11	10	10	9	9	10	11	11	12	12	10	10	11	11	9
Watauga-Ashe 22															
Wayne	42	43	44	47	50	52	50	55	56	56	56	55	53	53	48
Wilkes 2								18	19	19	19	18	17	17	16
Wilkes-Alleghany	20	21	22	23	17	18	18								
Wilson	36	38	39	38	40	42	43	44	46	49	52	54	55	55	52
Yadkin 19															
Yancey															
Totals	2,896	3,058	3,127	3,171	3,211	3,247	3,322	3,351	3,429	3,515	3,566	3,597	3,633	3,674	3,701

(1) See Iredell-Alexander. (2) See Wilkes-Alleghany. (3) See Watauga-Ashe and Ashe-Watauga. (4) See Mitchell-Avery. (5) See Pasquotank-Camden-Dare and Pasquotank-Camden-Currituck-Dare. (6) See Alamance-Caswell. (7) See Macon-Clay. (8) See Pasquotank-Camden-Currituck-Dare. (9) See Rowan-Davie. (10) See Jackson-Swain. (11) See Martin-Washington-Tyrrell. (12) See Mitchell-Avery, Mitchell-Watauga, and Mitchell-Yancey. (13) See Avery and Mitchell. (14) See Mitchell, Watauga-Ashe, and Ashe-Watauga. (15) See Stanly-Montgomery, Montgomery, and Stanly. (16) See Edgecombe-Nash. (17) See Durham-Orange. (18) See Chowan-Perquimans. (19) See Surry-Yadkin. (20) See Washington-Tyrrell and Martin-Washington-Tyrrell. (21) See Mitchell-Watauga, Watauga-Ashe, and Ashe-Watauga. (22) See Ashe-Watauga.



